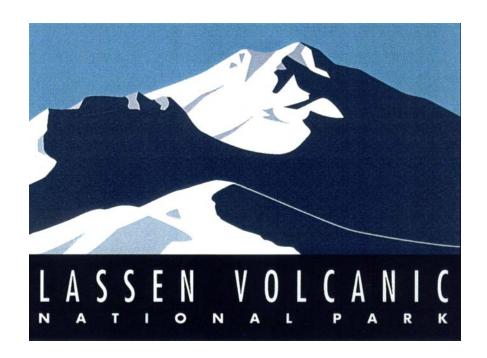
LASSEN VOLCANIC NATIONAL PARK

COMMERCIAL SERVICES PLAN AND ENVIRONMENTAL ASSESSMENT

January 2007



Summary

On June 8, 2005, the first Environmental Assessment for the Commercial Services Plan was made available for public review. After reviewing the comments received, and with changes in personnel in several key park positions, however, the initial EA and plan were re- assessed. The first EA, along with all of the public comments received from the first EA, were carefully reviewed by the new Superintendent and the entire Senior Management Team. In the Fall of 2005 it was decided that several significant changes were needed within the plan and that a new plan and EA would need to be drafted. This EA is the result of that decision.

The NPS is assessing the commercial services program at Lassen Volcanic National Park to determine the levels and types of necessary and appropriate commercial services that should be provided. The scope of this planning effort includes all existing and potential commercial services at the park for the next 5 to 10 years.

The Concessions Policy Act (PL 89- 249) guided management of concession services by the NPS from 1965 to 1998. In 1998, Congress passed the NPS concessions Management Improvement Act (PL 105- 391) which supercedes the previous law. The new law incorporates many of the conditions of the old law but some significant changes were made. The NPS has written new regulations, found at 36 CFR 51, to implement the new law.

The NPS has several commercial services authorization instruments available to use to manage commercial services at Lassen Volcanic National Park. Concession contracts are used to manage commercial services that are assigned land and/or facilities in the park. Because of this commitment of park resources, these commercial activities must be necessary as well as an appropriate use of the park. Other commercial services begin and end outside the park but the activity takes place in the park, such as guide and instructional services. These activities have previously been managed with Incidental Business Permits (IBPs). The Concessions Management Act of 1998 reformed commercial operations management in National Parks. Under the new law the former IBPs will be managed by an essentially the same but new instrument, a Commercial Use Authorization (CUA). CUAs can also be used for extremely small in- park activities. Many activities occur in a park that have a commercial aspect but do not fit neatly into the above categories. These unique or one- time activities are usually issued a Special Use Permit and include activities such as commercial filming and special events like festivals and weddings.

The commercial services program at Lassen Volcanic National Park includes one concession contract, which is currently with California Guest Services, Inc. (the current contract has expired and has been continued under its existing terms). California Guest Services provides visitor services at Manzanita Lake campground, the Southwest entrance area, and Drakesbad Guest Ranch. A new concession contract is expected to be awarded by January 1, 2008. In 2005 the park issued 13 IBPs to provide services such as guiding and bus tours. In addition, Lassen Association operates under a cooperative agreement wherein they are permitted to sell educational and interpretive materials in specific areas of the park.

This Commercial Services Plan is an implementation plan and therefore must be consistent with the established planning direction for the park and achieve the desired future conditions or

goals for the park. However, the drafting of this plan offers the park an opportunity to revisit the decisions and proposed actions of previous plans to assure that they are still appropriate and fulfill the needs of the park and its visitors. The mission for Lassen Volcanic National Park is to "conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations." The goal of the Commercial Services Plan is to provide visitors with quality, necessary and appropriate services, while at the same time supporting the Park's mission.

This plan identifies three alternatives. Alternative 1, the "no-action" alternative would maintain visitor services at their current level with the addition of the services currently planned for in the Southwest Visitor Services Facility Environmental Assessment. Alternative 2, the preferred alternative, maintains most of the elements in the no action alternative and also allows for a moderate increase in the commercial services offered in the park to provide for an enhanced visitor experience while also providing greater protection for park resources. Alternative 3 maintains most of the elements of the no action alternative and provides a maximum range of commercial services.

The impact topics that are related to the three alternatives are: soils, vegetation, wildlife, archeological resources, socio- economics, and visitor experience. These topics are reviewed in this environmental assessment for the potential environmental consequences that could result from the implementation of each of the three alternatives.

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PURPOSE AND NEED FOR THE PLAN

The purpose of this Commercial Services Plan is to provide a process for establishing the types and levels of commercial activities necessary and/or appropriate for Lassen Volcanic National Park. This plan will provide a comprehensive guide for managing commercial services in Lassen Volcanic National Park for five to ten years, and will address in more detail decisions regarding commercial activities that were determined necessary in the General Management Plan (NPS 2003).

Commercial activities in the park that will be managed by the implementation of this plan include Concession contracts, Commercial Use Authorizations, Special Use Permits, and Cooperative Agreements. By law (36 CFR 5.3), all commercial activities that occur within a park must be authorized by some written agreement. Park concessions are contracted visitor services that have been determined to be necessary and appropriate. Other commercial activities such as guide and instructional services that originate and end outside the park or that have limited sales will generally be authorized by Commercial Use Authorizations (CUAs) which are issued for one or two years. The Lassen Association has a cooperative agreement with the park to sell educational and interpretive materials in specific locations within the park. Special Use Permits authorize "one- time" and quasi- commercial events and activities such as utilities, roads, communications equipment, commercial filming, weddings, festivals, and other special events.

The NPS should determine what types of commercial activities are necessary and/or appropriate at Lassen Volcanic National Park. The *National Park Service Concessions Management Improvement Act of 1998* mandates that concession development and services at Lassen Volcanic National Park, and all NPS units, be both necessary and appropriate to the park in which they are located because they usually involve a commitment of resources. Other authorized commercial activities need only be appropriate. All commercial activities must operate in a manner that is consistent with the mission of Lassen Volcanic National Park. That is to say, all commercial activities operating within the park should provide high quality visitor experiences while protecting important natural, cultural, scenic, and wilderness resources. The General Management Plan and other planning documents identified that the park mission or purpose is to conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations.

HOW TO USE THIS PLAN

The first half of this document provides legal, policy, and planning information that has a direct effect on the management of commercial activities at Lassen Volcanic National Park. Information about what tools are available to manage commercial services and existing condition information about resources, visitor use, and current commercial activity is also provided. This information is the basis for the plan. All proposals must comply with laws, regulations, and policies for Lassen Volcanic National Park.

The second half of the document presents alternative ways to manage the commercial services in Lassen Volcanic National Park. All the alternatives must be consistent with laws, policies, and the purpose of the park. The possible impacts of those actions are then assessed.

Public input for this plan is critical to ensure the correct types and amounts of commercial services are available at Lassen Volcanic National Park. The public is encouraged to review the document and to comment on the plan, the three alternatives, and any other issues related to commercial services within Lassen Volcanic National Park.

PARK SETTING

Location and Access

Lassen Volcanic National Park, established in 1916, is located in northeastern California in portions of Shasta, Lassen, Plumas, and Tehama counties (See Maps 1 and 2). The 106,372- acre park is located about fifty miles east of both Red Bluff and Redding and is within a day's drive of the Sacramento and San Francisco Bay metropolitan areas. The park is accessible from Interstate 5 to the west via State Routes 36 and 44. From Reno, Nevada and Interstate 80, the park is accessible from US Highway 395 and State Routes 36, 44 and 89.

There are two main entrances to the park in the northwest and southwest corners connected by the main park road that goes around the east flank of Lassen Peak. The main park road is closed in winter between the Southwest Entrance Station and Manzanita Lake Ranger Station due to snow. There is unpaved road access to Butte Lake in the northeast and Juniper Lake in the southeast corners of the park. A paved county road from Chester goes up the Warner Valley. Near the park boundary the road becomes unpaved and ends at the Drakesbad Guest Ranch. The park has an extensive trail system including portions of the Pacific Crest Trail.

Natural Resources

Lassen Volcanic National Park is an outstanding example of a dynamic geologic landscape. Lassen Peak erupted over a six- year period between 1914 and 1921. Preserved within the park is the site of the most recent volcanic eruption within the continental United States, prior to the Mount St. Helens eruption of May, 1980. Lassen Peak is one of the largest plug dome volcanoes in the world. The park is unique in that it also preserves, in a relatively small geographic area, examples of the three other types of volcanoes recognized by geologists: shield volcanoes, composite volcanoes, and cinder cones.

Three biogeographic regions come together in Lassen Volcanic National Park: the southern Cascade Mountain Range, the northern Sierra Nevada Mountains, and the Basin and Range Province. The overlap of plant species commonly associated with each area, combined with the variety of geologic formations and textural compositions of lava, contribute to a high diversity of native plants in these communities. The natural environment in this rich area includes conifer forests, volcanic formations with rocky exposed areas, hydrothermal areas, riparian corridors, lakes, streams, chaparral hillsides, and meadows. It provides shelter and sustenance to a variety of resident and migratory wildlife.

Wilderness

In October 1972, Congress designated 75% of the park (78,982 acres) as the Lassen Volcanic Wilderness. The 2003 General Management Plan for Lassen Volcanic National Park proposes an additional 25,000 acres be included for wilderness designation. Parkland proposed for wilderness expansion is currently managed as natural areas with the objective of protecting and conserving the natural and cultural resources found within these areas. National Park Service (NPS) wilderness management policies are based on provisions of the 1916 National Park Service Organic Act, the 1964 Wilderness Act, and legislation establishing individual units of the national park system. These policies establish consistent servicewide direction for the preservation, management, and use of wilderness and prohibit the construction of roads, buildings and other man- made improvements and the use of motorized vehicles in wilderness. All park management activities proposed within wilderness are subject to review following the minimum requirement and minimum tool concepts and decision guidelines.

Wilderness use at Lassen includes such activities as hiking, backpacking, horseback riding, swimming and fishing in the summer, and winter cross country skiing and snowshoeing. The average annual overnight wilderness use in the park is approximately 3,325 person nights per year (this does not include individuals camping in developed campgrounds or staying at Drakesbad). There are approximately 150 miles of trail and 15 trail bridges within the park's wilderness. The park includes portions of two Congressionally designated trails, the Nobles Emigrant Trail, a component of the California National Historic Trail, and the border- to- border Pacific Crest National Scenic Trail. There are three historic structures maintained within the wilderness: Mt. Harkness Fire Lookout, and Twin Lakes and Horseshoe Lake patrol cabins.

Cultural Resources

Lassen Volcanic National Park contains cultural resources that are diverse and reflect a history of human activity extending at least 8,000 years. These resources include 92 known archeological sites, 111 historic structures and features, 11 properties listed on the National Register of Historic Places (others are eligible for nomination), 6 identified cultural landscapes, thousands of museum objects, a large volume of archives, and a portion of the Nobles Emigrant Trail (a component of the California National Historic Trail). The Lassen Volcanic region has been a home to the Atsugewi, Mt. Maidu, Yahi and Yana Indians, as well as European settlers.

Geology

A study completed by U.S. Geological Survey (USGS) geologists in 1970 raised considerable concern over the safety of public use facilities located at Manzanita Lake because they were considered to lie within the potential rockfall avalanche zone of the Chaos Crags (Crandall, 1970). As a result of this study many of the facilities at Manzanita Lake were closed in the 1970s. A subsequent geologic analysis in 1987 reevaluated the avalanche hazard, and concluded that since only 10 percent of the original dome that collapsed 300 years ago still remains in place, it is reasonable to conclude that future avalanches from that dome would have a more restrictive runout than the avalanches of 300 years ago (Eppler, 1987). This subsequent analysis concluded that the avalanche hazard was less threatening and extensive than indicated in 1970. Based on this reappraisal, some of the facilities were reopened and remain open today. All of the alternatives discussed in this Environmental Assessment take into consideration the area that is still regarded by the USGS as potentially hazardous and all proposed facilities would be located outside of that area.

Seismic activity on Lassen Peak is monitored by the USGS since volcanic activity is typically preceded by earthquake activity. There is a net of nine seismometers located both inside and outside the park which provide a continuous record of seismic activity. The instruments are connected by radio, satellite, and open telephone line to the USGS Earthquake Laboratory in Menlo Park, California and are monitored 24- hours per day.

Visitation and Visitor Use

Lassen Volcanic National Park has averaged about 380,000 visits per year for the last 10 years. Visitation has been in a downward trend from peaks of near 500,000 in the 1970's and 1980's. Some of this decrease in visitation is likely attributable to the removal of the lodge at Manzanita Lake. Although the park is open year-round, vehicle access through the park on the main road is usually only available from June through October due to heavy snowfall. The four-month period between June and September typically accounts for nearly 80 percent of the annual visitation. Substantial drops in visitation can occur during years of early road closure and late spring road openings due to snow. In 2004, 15 commercial buses entered the park, 11 of which came during the summer months.

The majority of visitors to Lassen Volcanic National Park are touring the region. They spend about a half- day driving through the park and stopping at interpretive attractions. While it is not considered a destination park, many visitors do stay overnight in the park. A much larger majority, however, stay overnight outside the park in nearby communities. Within the park there are nine campgrounds with a total 10- year- average of 64,000 overnight stays per year. Limited commercial lodging is available at Drakesbad, which consistently operates at near capacity during the summer season, averaging about 5,500 overnight stays per year. The clientele at Drakesbad tends to be repeat visitors that have been coming back generation after generation. The park provides over 480 individual campsites and 16 group campsites in nine campgrounds.

An average of 3,325 overnight stays per year have occurred in the backcountry over the last 10 years.

Services Available Outside the Park Boundary

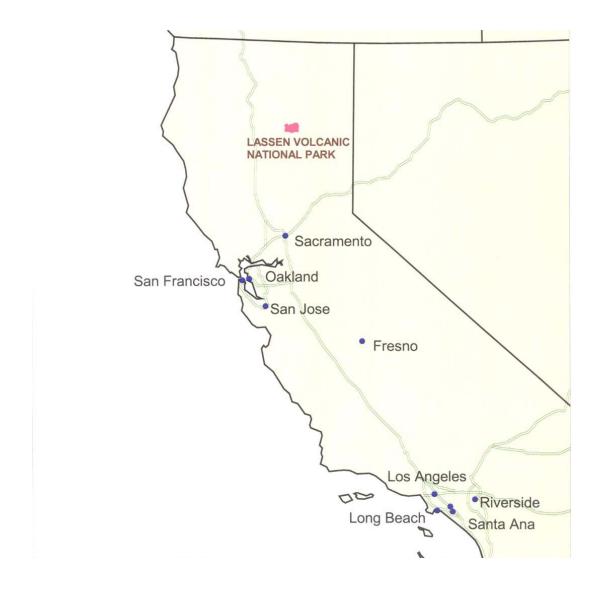
Many services including food, lodging, camping, commercial centers, and automotive services are available at Red Bluff, Redding, and Susanville, about 50 miles away. Similar services are available in the town of Chester, about 25 miles south/southeast of the park. Chester is also the access point to the Drakesbad Guest Ranch developed area within the park. Limited visitor services are available at the small communities near the park including Mineral, Mill Creek, Old Station, and Shingletown.

At the time of the 2003 GMP scoping the Park heard from a number of comments that they would like to see lodging in the park. There were several lodging/motel type projects planned outside the park on the highway 44. Therefore, the decision was made in the 2003 GMP that no new lodging would be considered because adequate facilities would soon become available just outside the park boundary. These facilities, however, have never been completed. There was a project approved by Shasta County in the central area of Shingletown for a motel and restaurant that was never constructed. The new owners (at the time of the GMP writing) of Big Wheels said they planned to construct overnight lodging in conjunction with their business. Since then, however, the restaurant has burned down and those owners have moved on. Old Station continues with only one small facility. At the time of the GMP there was talk of a refurbished set of units there, but this has not been acted upon.

Air transportation with rental car service is available in Redding, Sacramento, and Reno. Currently, there is no scheduled bus service to the park.

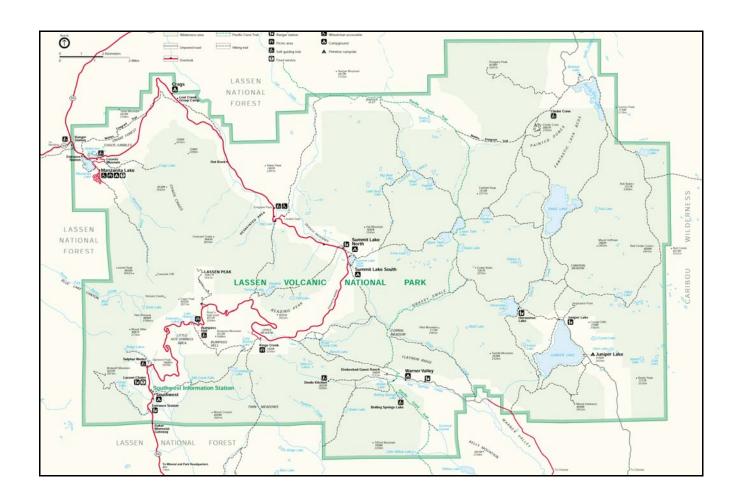
MAP 1

VICINITY MAP



MAP 2

LOCATION MAP



GUIDING LAWS, REGULATIONS, AND POLICIES

All activities at Lassen Volcanic National Park are governed by the 1916 Organic Act that created the NPS and congressional and presidential authorizing actions taken specifically for the park. Laws specific to Lassen Volcanic National Park can be found in the 2003 *General Management Plan*.

In addition, there are several laws and policies that deal directly with commercial activities in parks. Regulations with specific instructions on commercial authorizations are located at 36 Code of Federal Regulations (CFR) part 51. The regulations state that all commercial activities in national parks must be authorized by some written agreement.

The Omnibus Park Management Act of 1998 was passed by Congress and signed into law November 13, 1998. The *National Park Service Concessions Management Improvement Act of 1998 (PL 105-391)* is the short title for Section IV of the Omnibus Act and deals directly with NPS commercial services. This legislation supercedes the Concessions Policy Act, which guided Park Service management of concessions for 33 years. The new legislation incorporates much of the philosophy of the old law including "...development...shall be limited to those accommodations, facilities, and services that are necessary and appropriate for public use and enjoyment of the unit of the National Park System in which they are located and are consistent to the highest practicable degree with the preservation and conservation of the resources and values of the unit." In addition, the secretary of the interior should "...exercise his authority in a manner consistent with a reasonable opportunity for the concessioner to realize a profit." Thus, only economically feasible concession operations should be introduced. The intent of Congress with the new law was to increase competition for concessions in parks and increase the return to the government.

Consistent with this intent, the new law makes some significant changes. Under the previous Concessions Policy Act all existing concessioners had a "preferential right of renewal". Under Section 403 of PL 105-391 only outfitter and guide services and small business operations with anticipated gross receipts under \$500,000 will be given a right of preference in renewal of contracts. All other concession contracts will be competitively awarded. The Concessions Policy Act typically authorized contracts for a 20 year term with some contracts having up to a 30 year term. The term of new contracts will normally 10 years, with 20- year contracts only issued in special financial investment situations and only with approval from the NPS Director. Under the old law when a concessioner made a capital investment or improvement in facilities they received a Possessory Interest in the facility. This has been changed to Leasehold Surrender Interest which allows for capital investments and a process for valuing the interest through a formula involving inflation and depreciation. Under the old law, all franchise fees paid by a concessioner were sent to the United States General Treasury. Under the new law, all franchise fees stay with the Park Service to be used for concession-related, visitor service, or other appropriate projects. The park that collects the fees retains 80% while the other 20% is used servicewide. Regulations to implement the new law as it pertains to concessions have been written, reviewed by the public, and approved. New standard contract language has also been written and approved.

Two other significant changes affect the authorization tools available to the Park Service. Concession Permits were used for less complex operations. They were discontinued and replaced with a three tiered concession contract system that reflects the complexity of the operation (see the concession contract description below). The other change is that Incidental Business Permits have been replaced with Commercial Use Authorizations (CUAs) that are authorized in PL 105- 391. CUAs are the tool used for business activities that begin and end outside the park or for activities that occur in the park on a limited basis. The old Incidental Business Permit regulations did not allow for the limitation of the number of permits issued. PL 105- 391 gives the NPS the authority to limit the number of Commercial Use Authorizations issued if needed for resource protection reasons. The Park Service is developing regulations to implement how CUAs will be limited and issued. Until the regulations are approved the Park Service has issued interim guidelines for issuing CUAs.

The Cost Recovery Act (16 USC 3a) requires the NPS to recover the cost of providing services to business permittees. The cost is defined as the amount expended by the NPS in order to accommodate commercial use. It includes the cost of processing and administering the permit and monitoring the activities allowed in the permit for compliance with conditions and stipulations. Administration costs can be averaged but monitoring costs must be itemized, actual costs.

According to NPS *Management Policies*, commercial activities are conducted under safeguards that protect against unregulated and indiscriminate use and ensure that heavy visitation does not impair park values and resources. Concessions in park units should be viewed as a tool of management to be used, when necessary and appropriate, to achieve the objectives of the park unit. Historically, the concessions program has been based on considerations such as visitor needs, the agency's ability to satisfy those needs, the resource itself, and the apparent carrying capacity. Changing conditions and increasing pressure to meet visitor needs requires a strategy that balances visitor needs with the purposes and values of individual parks.

It is the policy of the NPS (NPS- 21) to allow commercial filming and photography when it is consistent with the protection and public enjoyment of park resources. The regulations used to manage commercial filming are contained in 36 CFR 5.5. The NPS has the authority and responsibility to manage, permit, and/or deny filming projects consistent with the following principles:

- Natural, cultural, wilderness, and recreational resources will be protected
- Activity will not unduly conflict with the public's normal use and enjoyment of a park
- Visitors using cameras and /or recording devices for their own personal use are generally exempt from film permit requirements
- Coverage of breaking news never requires a permit, but it is subject to the imposition of restrictions and conditions necessary to protect park resources and public health and safety, and to prevent derogation of park values
- The NPS will not censor the content of any project, nor require finished film products for review, files, or documentation purposes

Commercial filming programs in parks are usually managed as a special park use with full cost recovery. Applicants reimburse the park for all costs related to meetings, location scouting,

development of permit stipulations, and on-site monitoring of film projects. Each film project

usually has a unique set of conditions developed to ensure that park resources are protected and that filming activities do not impact other park visitors.

The NPS guidelines, known as Directors Orders (DO) that are applicable to commercial services include:

- DO- 48 Concessions Guidelines
- DO- 50 Loss Control Management Program Guideline
- DO- 53 Special Park Uses
- DO- 83 Public Health Management Guideline

These guidelines, along with laws and policies, standard contract language, and operating procedures, are used in managing commercial activities throughout the national park system and are available for review at www.nps.gov.

COMMERCIAL SERVICES AUTHORIZATION INSTRUMENTS

Concession Contracts

All concession operations must be approved and authorized by the NPS under delegation of authority through the preparation of a prospectus (solicitation of offers), NPS review of proposals, selection of the best offer, and final contract award and execution. The procedures are detailed in 36 CFR 51.4.

Concession contracts are legal agreements between the Secretary of the Interior (or authorized delegate) and a concessioner that requires the concessioner to provide certain visitor accommodations, facilities, or services in the parks. Some services are required and must be provided. Others are authorized and can be provided. Category I concession contracts are used for large, complex operations where there is land and/or facilities assigned and the concessioner is making capital improvements which means there is leasehold surrender interest. Category II concession contracts are used for large, complex operations with land/facility assignments but there is no capital improvement program or leasehold surrender interest. Category III concession contracts are used for less complex operations without land/facility assignments or leasehold surrender interest. By law, all contracts are issued by competitive bid. The typical term for a contract is 10 years although under certain financial situations where a large capital investment is involved up to a 20- year term can be authorized with specific approval from the NPS director.

Concession contracts do not include a preferential right of renewal except for outfitters and guide services or operators with annual gross receipts less than \$500,000. Concessioners are no longer given a preferential right of refusal for new or similar services. It is possible to have multiple concessioners offering the same service. When a concessioner makes capital improvements to a NPS facility or builds a new facility they acquire a leasehold surrender interest in the facility until the interest is acquired by a new concessioner or bought out by the government.

Under the terms and conditions of a concession contract, the Secretary has the authority to assign land and government improvements (facilities) to the concessioner as necessary and appropriate for conduct of operations. Concession contracts contain an operations plan, a maintenance plan, and, in some cases, a capital facility improvement program. They require care of land and government improvements provided by the NPS to the concessioner. Compliance with the plans is mandatory.

Financial functions associated with issuing and managing concession contracts include economic feasibility studies and ensuring a fair return to the government. General standards are set for calculation of financial returns to the United States and affirm that revenue production is subordinate to resource protection and visitor services.

Commercial Use Authorizations

Commercial Use Authorizations (CUAs) are replacing Incidental Business Permits (IBPs) as authorized in PL 105- 391. There are two types of CUAs. One authorizes services that begin and end outside of the park boundary. All financial transactions and advertising must take place outside of the park. Exclusive authority to provide services is not provided. Activities do not have to be necessary but must be an appropriate use in the park. There is no assignment of land or facilities. The term of the permit is 1 or 2 years. A fee can be charged for the permit to recover the cost to the government to administer the permit. An example would be guide services, motorcoach tours, and recreational tours. The other type of CUA authorizes small business to occur in the park. Transactions are allowed and annual revenues are limited. No facilities are assigned. An example would be firewood sales from a vehicle.

Monitoring of all commercial activities is essential to ensure that business operations are conducted in a safe, fair, and reputable manner consistent with the mission of the park. Monitoring is also essential to ensure compliance with resource protection conditions stated in the permit. Where carrying capacities exist in parks to manage use, monitoring ensures compliance.

The NPS is authorized by the Cost Recovery Act to collect all costs associated with CUAs. There are three elements to the determination of the dollar amount that can be charged: application, administrative, and monitoring costs. Application costs start with the request for the use of park resources and end with mailing the application form. Administrative costs start when the completed application form is received and end with the final signing of the permit. Monitoring costs start when the permittee arrives in the park to perform the permitted use and end when the permitted use is over and the permittee leaves the area. Application and administrative costs can be determined using average costs derived from historic records, but monitoring costs must reflect actual itemized costs.

PL 105- 391 allows the Park Service to limit the number of CUAs it issues for a particular activity for resource protection reasons. This is essentially a function of the carrying capacity of the resource. Limitations must be based on the rationale of carrying capacity. The Park Service is currently defining the process it will use to establish, issue, and manage limited CUAs through the regulatory process. When the regulations are reviewed and approved they will be implemented. Interim guidelines have been issued to facilitate the transition from IBPs to CUAs until the regulations are approved.

Special Use Permits

Special events may be authorized under permit by the Superintendent subject to the same criteria as other special park uses provided there is a meaningful association between the purpose of the park and the event and the event contributes to visitor understanding of the significance of the park.

A Superintendent may approve a request for a special event if it is determined that:

- It will not conflict with law or policy
- It will not be a derogation of the values and purposes for which the park was established
- It is consistent with the park's enabling legislation
- It does not have reasonable potential to cause illness, personal injury, or property damage
- It will not unduly interfere with normal park operations, resource protection, or visitor use

The NPS will not permit the staging of special events that are conducted primarily for the material or financial benefit of participants or that involve commercialization, advertising, or publicity by participants. Events for which a separate public admission fee is to be charged, unless the event is directly related to the purposes for which the park was established, will not be permitted either. In addition, the NPS will not sponsor or issue permits for special events conducted in wilderness areas if those events might be inconsistent with the protection of wilderness resources and values.

The NPS will recover costs incurred in administering permits and monitoring the activities it authorizes. It will also establish and collect permit fees authorized by applicable legislation, regulations, and policies.

Special Use Permits are not covered by the new NPS concession legislation. Separate regulations for the management of Special Use Permits can be found in 36 CFR 1.6. Guidelines for the issuance of Special Use Permits are provided by NPS- 53. The guidelines include NPS policy and instructions regarding Commercial Filming and Photography, Special Events, Rights-of-Way, and Use and Occupancy permits.

Cooperating Associations

Congress authorized cooperating associations in 1946. Their mission is to support park interpretive and scientific activities through proceeds from the sale of educational and interpretive materials in a park, which is a commercial activity. As non- profit organizations the proceeds from this commercial activity go back to the parks, after expenses. They are usually assigned space in a visitor center or other visitor contact facility. Cooperating associations are authorized by a cooperative agreement. The agreement only authorizes the sale of educational and interpretive materials. If it is appropriate for an association to sell convenience or other items, such as in remote locations where it is not economically feasible for a concessioner to provide the service, another authorization such as a concessions contract can be issued for the sale of those items. Cooperating associations are managed by a servicewide set of criteria and policies, NPS Director's Order #32.

Other Authorizations

In 1982 the NPS established the Historic Leasing Program to lease historic structures to individuals and organizations. The program was designed to spur rehabilitation and reuse of designated historic structures and federally owned lands. Any proceeds from these leases were to be used to maintain, repair, and preserve historic properties and to defray the costs of administering the leasing program. This is a commercial activity authorized by a lease.

Some park units have special legislation that allows commercial activity and/or commercial support of activities. For instance, many parks have private inholdings or lifetime lease arrangements for private dwellings within the park boundary. These inholdings could be commercial in nature and/or require commercial support for delivery of goods and services. These types of commercial activities are often authorized by special written agreements that outline conditions, insurance requirements, and other pertinent information.

EXISTING COMMERCIAL SERVICES

Commercial Services Program

The commercial services program at Lassen Volcanic National Park includes evaluating concessioner performance, approving rates charged by the concessioner based on an analysis of comparable prices in the private sector, safety inspections, public health oversight, and responding to questions and concerns from the public and from businesses. In addition, with a varying degree of assistance, it includes preparation of all contracts, permits, and the associated conditions/stipulations documents.

Concessioner

They have held a concession contract at the park since October 1982. A continuation that expires on December 31, 2007 was granted on January 1, 2006. The contract was executed under the old law and the concessioner does not have a preferential right of renewal. The terms of the contract require the concessioner to provide food, lodging, swimming pool (fed by hot springs), and saddle horse services, and it authorizes massage services and guided fly fishing services at Drakesbad Guest Ranch. Year- round food and merchandising services are required at the Southwest Visitor Center. Groceries, camper supplies, limited souvenirs, snack bar, and a gasoline station are required at Manzanita Lake Camper Services Store. The government owns all the facilities assigned to the concessioner including the Manzanita Lake Camper Services Store, the Southwest Visitor Center, and all the buildings at Drakesbad Guest Ranch. There are no concessioner owned facilities in the park. The concessioner has no possessory interest.

Commercial Use Authorizations

Beginning in 2007 Lassen Volcanic National Park will issue Commercial Use Authorizations under the interim guidelines established under the NPS Concessions Management Act.

The number of IBPs (which CUAs will be replacing) issued by the park has remained relatively constant over the past few years. There were 13 IBPs issued in 2005 for activities that were determined to be appropriate commercial uses by park management. Eight permits were issued for guide services including mountaineering, ski tours, hiking, camping, and recreational activities. Some of these are authorized for day use and others for overnight use. Four permits were issued for bus tours in the park. One operator is authorized for painting tours.

Commercial use can be limited for resource protection reasons. Limitations are a function of the capacity of the resource to accommodate use. In some cases the Superintendent is authorized to suspend issuing permits completely. Under normal circumstances, stipulations are attached to permits to ensure compliance with specific park rules and regulations, protect resources from over or inappropriate use, and to enhance the experience for clients and general visitors.

The NPS is required to recover all costs associated with CUAs. This includes the cost of issuing the permit and monitoring compliance with the conditions in the permit. The Superintendent has the prerogative to waive the fee if appropriate.

Special Use Permits

Twelve Special Use Permits were issued in 2005. The most common requests are for use of the ball field in the Mineral Headquarters area. Special Use Permits are issued annually for the Ancestral Run, Diving and Research at Lake Helen by NASA and weddings at various locations.

Cooperating Association

Lassen Volcanic National Park has an agreement with the Lassen Association to sell interpretive materials at the Loomis Museum (which is located in the Manzanita Lake developed area) and at the headquarters information office. The cooperating association has pamphlets and brochures available for a small fee at major trailheads. A small sales outlet for educational and interpretive materials is located at the Warner Valley, Juniper Lake, and Butte Lake ranger stations. Once constructed the Lassen Association will operate their primary outlet at the Southwest Visitor Center.

PARK MISSION AND MISSION GOALS

The Lassen Volcanic NP mission statement is based on the park's enabling legislation and is clearly stated in the General Management Plan (NPS 2003) and the Strategic Management Plan (NPS 2003b). The Strategic Plan was required of all federal government agencies by the Government Performance and Results Act (GPRA).

PARK MISSION STATEMENT

"...to conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations."

The Lassen Volcanic National Park *mission goals* are a set of statements that describe the desired resource conditions and visitor experiences that, taken together, fully achieve the park's purpose, maintain its significance, and meet its mandates.

- Natural, cultural, and wilderness resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
- The park contributes to knowledge about cultural and natural resources and associated values; management decisions about resources and visitor use are based on adequate scholarly and scientific information.
- Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and recreational opportunities.
- Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
- The park uses current and sustainable management practices, systems, and technologies to accomplish its mission.
- The park increases its managerial capabilities through initiatives and support from other agencies, organizations, and individuals.
- Lassen Volcanic National Park continues to provide a wilderness/rural experience with opportunity for adventure, solitude, and enjoyment of pristine environment.

EXISTING PLANNING DIRECTION

A Commercial Services Plan is an implementation plan. Implementation plans provide the details of how specific areas of park operations, such as commercial services, will achieve park goals within the limits established. It should also be consistent with the basic management philosophies established in higher level plans such as the General Management Plan (NPS 2003) and Strategic Plan (NPS 2003b). These plans identify the mission, purpose, and significance of the park. They also identify goals or desired future conditions for the park. While the General Management Plan (GMP) provides this plan with an overall direction, this planning effort offers park management and the public the opportunity to revisit the decisions and proposed actions of previous plans dealing with commercial services. This will help to assure that they are still appropriate and fulfill the needs of the park and its visitors. This plan can, therefore, more fully refine or amend the decisions of the GMP regarding commercial services, while still complying with the basic management philosophies established in the GMP and work towards achieving park mission goals.

The GMP for Lassen Volcanic National Park established management zone prescriptions for the park that describe the desired resource conditions, visitor experience, and management strategies for particular areas. Among other things, appropriate visitor use levels are established that relate to resource carrying capacities. The GMP defines the management zones in the following manner:

In the *wilderness zone* resources are intended to be pristine and natural processes prevail. Visitor opportunities for independence, solitude, and application of outdoor skills are high and the probability of encountering other visitors is low. To achieve this high level of resource and experience preservation limitation of visitor use is appropriate.

In the *winter backcountry zone* natural processes will not be impeded. Wilderness-like conditions will be experienced with moderate to high opportunities for challenge, adventure, and risk. There is a low probability of encountering other visitors. To achieve these conditions limitation of visitor use is appropriate.

In the *scenic drive zone* (*summer*) natural systems are not significantly affected. Sensitive resources and the historic Main Park Road landscape are protected from inappropriate visitor use and development. Visitor attractions are convenient and accessible and the probability of encountering other visitors is high. Facilities are rustic and designed to harmonize with the natural environment. To achieve these conditions the zone is intensively managed with only the development necessary to provide a quality visitor experience and frequent ranger patrols.

In the *remote unit access road zone* (*summer*) significant natural processes and sensitive habitat are not affected. A driving experience in a largely undisturbed natural environment with minimal facilities is provided and encounters with other visitors are highly probable. To achieve these conditions development is held to the minimum necessary and regular ranger patrols occur.

In the *summer developed zone* sensitive resources are not affected. All visitor service facilities, including concession facilities, are located in this zone. They are convenient, accessible, and

comply with parkwide architectural standards by blending with the natural environment through rustic design. The visitor experience is structured and the chances for adventure are minimal. To achieve these conditions the zone is intensively managed.

The *winter developed zone* includes areas with major visitor facilities that are accessible and usable in the winter months. Visitor service facilities, concessions facilities, and ranger stations are included in the developed zone. The intent is to provide the information and conveniences necessary to allow visitors to enjoy and learn about the park's winter environment.

The *administration and inholder zones* are identified in the GMP but are not pertinent to this planning effort.

The vision in the GMP is for the park to serve as a model for ecosystem management and cultural resource protection for the benefit of present and future generations. Further, a diversity of visitors will be provided year- round opportunities for education and enjoyment. The GMP also states that many of the visitor use facilities, including concessioner facilities, not now available or fully functional in the colder months will be winterized to facilitate year- round operations.

PLANNING ISSUES

Public scoping meetings for the GMP were held in several cities around the park in the fall of 1998. The comments received were published in a GMP Newsletter #2 in October 1998. The following is a summary of the scoping comments received for the GMP:

Interpretation and Education:

- Enhance interpretive facilities at southwest entrance
- More naturalist programs at Drakesbad area of park
- More ranger programs, especially in evenings, at south end of park need better balance between north and south ends
- Provide a visitor interpretation center at the southwest entrance
- Provide special ranger tours for special interest groups

Natural Resource Management:

- Carrying capacity on trails
- Determine carrying capacity thresholds
- Encourage "leave no trace", especially backcountry camping educate and train for this
- Manage backcountry use to reduce impacts
- Manage park based on carrying capacity
- Reinforce denial for utility easements and transmitters on peaks
- Review operation of Drakesbad

Partnerships and Cooperation:

- Partner/reach out with other neighboring facilities private camping
- Work with local businesses to educate/provide information about the park

Regional Economic Aspects:

- Lassen is a jewel that should be shared to utilize economic potential
- Recognize economic asset to local communities

Visitor Access:

- Accommodate bicycles on roads at Manzanita Lake
- Consider traffic management; busses, people
- More cross- country ski tracks
- Groom park road in winter for cross- country skiing
- Improve circulation in Manzanita Lake area, especially at store
- Include access to store in winter snow clearing plan for Manzanita Lake area
- Locate facilities outside of park
- Pave road to Warner Valley and Drakesbad
- Provide access/roads to Butte and Summit Lakes think about future visitor services and more accommodations

Visitor Experience:

- Accommodate dogs there needs to be places for dogs
- Address potential increased visitation, i.e. manage crowds
- Backpacking is an area to look for visitor distribution
- Consider pacing (size of groups) on Lassen Peak and Bumpass Hell trails to avoid congestion
- Consider visitor limits; carrying capacity defined
- Develop no new permanent structures
- Keep the park as it is and as natural as possible
- Look at distribution pattern of people visiting the park, related to carrying capacity
- Manzanita Lake Camper Store area congestion; safety concerns and adequate maneuverability space for RVs
- Reestablish ski lift at the southwest entrance
- Separate tent and RV campers
- Visitors comment to local business owners an appreciation for the lack of crowding in Lassen

Visitor Service:

- Add bike trails at Manzanita Lake
- Add turnouts on main park road with picnic tables
- Address visitor facilities especially outside the park
- Adjust fee schedule in winter when facilities are minimal
- Against more concessions; current ones okay
- All restrooms should be accessible
- Balance facilities in park with campgrounds that are external to park
- Caution: "Not all parks need to be Yosemite Valley" watch for over development
- Consider alternative uses for Drakesbad
- Consider the role of concessions in the park length of contract and disposition of employees

- Develop backcountry cabin(s) for winter/spring use
- Encourage visitation; provide winter programs
- Hook-ups for RVs
- Minimize concession operations
- More services for south side of park
- Need for more roving interps educate all staff to answer questions
- Need for overnight lodging facilities in the park
- Need handicap accessibility
- Promote cross- country skiing
- Provide improved visitor center/concession building at southwest entrance for year-round use
- Provide more opportunities and activities along the road
- Provide RV camp at southwest entrance
- Provide winter camp opportunities at Manzanita Lake
- Re- institute ice skating at Reflection Lake
- Review concession operation for park (Too much? Too little? In the right places?)
- Review need for concessions in winter at south entrance
- RV facility accommodation
- Ski area added back or good family- oriented winter activities provided
- Support construction of Pavilion at northwest entrance
- Support for more visitor services/activities
- Support information center and kiosk structure
- Visitors want kennels at trailheads
- Winter use facilities (relationship to fee collection \$)

The above scoping comments were addressed in the GMP, but also served as valuable input for the Commercial Services Plan.

Public scoping meetings specific to the Commercial Services Plan were held in 2002 in Chico (August 19), Red Bluff (August 21), Redding (August 20), and Chester (August 22). They were an open house format with information displayed to generate discussion with park and planning team staff. A total of 32 people participated in the meetings and 6 individuals mailed comment letters to the park. Many ideas and suggestions were provided that are applicable to the purpose of this plan. Several new activities and services were suggested including:

- Commercial pack tours
- A hiker shuttle
- Services to remote locations in the park
- Eco-tours and seminars
- Electronic interpretive services (audio tour)
- Guide and instructional services in summer and winter
- Equipment rental in summer and winter

Other Comments included:

• Support for the Southwest Visitor Services Facility and improved services

- Enhanced winter activities and services
- Activities to extend the shoulder seasons
- More retail sales
- Addressing deferred maintenance needs for commercial services and facilities
- Changes to services and facilities to accommodate evolving visitor characteristics such as large RVs in campgrounds, tour busses, and facilities for large groups
- Relationship to scenic byway system
- Support for local communities providing food and lodging facilities outside the park.

In addition to the above comments from the public, the park and concession staff met in the fall of 1999 to discuss issues specific to commercial services at Lassen. The following summarize the ideas identified in that meeting:

- Plan should include input from comment cards received by concessioner
- Increased accommodations at Drakesbad and Manzanita Lake
- Better retail facilities
- Tour bus accommodations step on guides and food service
- Provide full services at Manzanita Lake similar to historic services (lodging and restaurant)
- Provide a range of lodging/overnight experiences have camping and Drakesbad but nothing in between
- Explore options to expand service in park—mobile service or something equivalent at Summit Lake, Butte Lake, Peak parking lot, and others
- Expand food service and facility at Manzanita Lake walk- up and sit down (inside and out) service
- Serve more visitors at one time at new southwest entrance facility inside/outside service, cafeteria style, catering opportunities for bus groups, flexibility in style of service for changing visitor pattern
- Drakesbad bath house remodel and expansion of services; esthetic improvements in pool area; alternative energy options; guided fly fishing services; and interpretive programs
- Lassen Association expanded retail space; services in remote areas of park; more interpretive services (programs, step- on guides, audio tours, etc.)

Four comments were received during the previous (2005) EA review period. One comment was received from the Federal Emergency Management Agency. This letter was dated July 21, 2005 and it pertained to the Park's responsibility for taking floodplains into consideration when performing construction. Three individuals sent comments. One individual, in a letter received on June 23, 2005, voiced strong support for the preferred alternative, "because it maintains the existing activities, services, and facilities which we have enjoyed over the past 35 years...." A second individual, in a letter dated July 9, 2005, did not state a preference for an alternative, but did state their preference to "leave Drakesbad as it is." The third individual, in a letter dated July 8, 2005, had concerns about the proposed changes to the booking and reservation system at Drakesbad and the proposal to allow non- Drakesbad guests to use the pool at Drakesbad. Several letters were received after the 30 day review period that were also taken into consideration during the writing of this most recent plan and EA. Emails received on September 16, 2005 and September 20, 2005, as well as a letter dated March 5, 2006, all state concerns regarding any potential changes to the reservation system at Drakesbad. One person gave his

concerns regarding the use of the swimming pool at Drakesbad by non- guests while another voiced concerns about both the use of the swimming pool as well as the potentially limited use of horses at Drakesbad. All of the above comment letters were fully considered in this planning process.

All of the above comments were considered in the formulation of alternative ways to approach commercial service management at Lassen. Some ideas and suggestions were more appropriate than others. All the ideas that were addressed in the plan were required to be consistent with the mission and goals set forth in the park's GMP. All management actions must fully comply with the laws (16 USC et. Seq) and regulations (36 CFR) pertaining to the management of all national park units.

DESIRED FUTURE COMMERCIAL SERVICES CONDITIONS

After consideration of legal direction and constraints, the mission and goals of Lassen Volcanic National Park, the approved planning direction for the park, and issues affecting commercial services in the park, the following desired future conditions or goals specific to commercial services were developed. They are the benchmark for all proposals in this plan. All alternatives and proposals had to strive to attain the conditions described.

- The types of commercial activities sustain thematic, educational, and environmental values
- The range of commercial goods and services offered allows visitors to safely enjoy and be satisfied with the availability, accessibility, diversity, and quality of experiences available
- Commercial services are comprehensively managed to achieve the mission and goals of the park
- A "light on the land", unobtrusive, commercial experience is provided
- Lassen remains a "traditional" park in the spirit of early national parks
- Commercial activities support and compliment the values of the park, while enhancing the visitor experience.

DESCRIPTION OF ALTERNATIVES

The following alternatives describe three different management strategies that were considered to achieve the desired future conditions for commercial services at Lassen Volcanic National Park. The No Action alternative proposes to maintain all existing activities, services, and facilities with a management strategy similar to the existing strategy. In addition, it includes the construction of the Southwest Visitor Center, as that project has already been assessed and found to have no significant impact on the environment. It is a viable alternative and presented as a baseline from which to compare the other alternatives. Alternative 2, the Proposed Action, also maintains all activities, services, and facilities in the park from the no action alternative. In addition, it adds several elements that moderately enhance visitor experience. Alternative 3 maintains all of the elements of alternative 2 and provides a maximum range of commercial services to enhance the visitor experience while still protecting park resources. All three alternatives are presented by geographical location in the park.

It should be noted that the NPS has issued interim guidelines to replace Incidental Business Permits with Commercial Use Authorizations (see earlier discussion). For the sake of long-term clarity, these permits will be referred to as CUAs in this document. It should also be noted that the proposal of an action in this plan does not necessarily guarantee that it will happen. Implementation is always subject to resource and funding availability. All the alternatives also assume that the actions in the Southwest Visitor Services Facility Environmental Assessment will be implemented.

Alternative 1 – No Action

Concept

In this alternative the NPS would continue current and planned commercial services at Lassen Volcanic National Park, including those not yet implemented, but already analyzed in the Southwest Visitor Services Facility Environmental Assessment (NPS 2004).

Southwest Area

In 2004, the NPS signed a Finding of No Significant Impact for the construction of a new Southwest Visitor Center at Lassen Volcanic National Park. The Chalet was demolished in 2005 and will be replaced with a new, larger, energy efficient, accessible, and sustainable facility. The commercial elements of the building will include food and beverage service and gift/merchandise sales. The food service includes deli style/made to order food with indoor and outdoor seating. Breakfast, lunch, and dinner will be available. It will be a year round operation with seasonally adjusted hours. In the winter the level of service and amount of offerings may be reduced in accordance with the level of visitation and visitor needs. Beer and wine sales will be authorized. The concessioner will be authorized to accommodate large groups such as tour bus groups for meals but not at the expense of use by general visitors. Merchandise sold will be thematic (specifically related to the natural and cultural resources found at Lassen Volcanic National Park) and would also include convenience and support items. Rental of recreational equipment such as, skis, snowshoes and bear proof food containers is authorized.

The Lassen Association will have space in the new facility for the sale of educational and interpretive materials.

The construction of the Visitor Center and the services listed above have already been approved and are included in all 3 alternatives in this Environmental Assessment.

Manzanita Lake

The camper store would continue to offer food and beverage, gift shop, and merchandise sales and services. The food service would remain the same with limited hot food, ice cream and deli items, with outdoor seating. Beer and wine sales would continue to be authorized. Gift and merchandise sales would continue to be required to be thematic and appropriate for the park. The camper store would continue to provide a range of camper supplies and support merchandise such as groceries, firewood and ice. The gas station, showers, and laundry facilities would all continue with no change. No commercial overnight lodging would be available at Manzanita Lake.

The Lassen Association would continue to be authorized to sell educational and interpretive materials at the Loomis Museum through a cooperative agreement.

Warner Valley and Drakesbad

Rustic lodging would continue to be required by a concession contract at the current level of service. Food service would continue to be sit- down dining with a fixed menu "American Plan" program that also accommodates common diets such as vegetarian. The general public would continue to be allowed to use the dining room; however, advance reservations would continue to be required. Merchandise sold would continue to include snacks, convenience and gift items. Horseback rides would continue to be required as well as the boarding of private party horses. The swimming pool would only be available to guests of Drakesbad and to the general public when they also make a reservation for dinner. Operation of the swimming pool and bath house would be required in the concession contract. The NPS would continue to authorize the concessioner to operate services such as massage therapy and fly fishing instruction as long as they are appropriate and continue to serve visitor needs.

The Lassen Association would continue to be authorized to operate a sales outlet for educational and interpretive items from the ranger station through a cooperative agreement.

Butte Lake

The Lassen Association would continue to be authorized to sell educational and interpretive items from the ranger station.

Juniper Lake

The Lassen Association would continue to be authorized to sell educational and interpretive items from the ranger station.

Summit Lake, Devastated Area parking lot, Kings Creek Picnic Area and Jones Cut

There would continue to be no commercial services at any of these locations.

Parkwide (Concessioner and Commercial Use Authorizations)

Back- country ski tours, bus tours, guided art seminars, guided backpacking, guided camping, guided fishing, guided hiking, guided photography, guided sightseeing, guided snow boarding, and guided snowshoeing would continue to be authorized. Commercial llama and goat pack trips, bicycle tours and any other activity listed in the Superintendent's Compendium (which is updated annually) would continue to be prohibited.

Alternative 2 – Proposed Action

Concept

In this alternative the NPS would take actions that would achieve the desired future conditions identified in this plan. This alternative would authorize a moderate amount of new services and make changes to existing operations in order to enhance the visitor's experience, while ensuring the protection of park resources.

Southwest Area

This alternative would provide the same services and operations at the same level as described in Alternative 1 with a few minor additions. First, groups would be allowed to use the new visitor center multi- purpose room for special events after obtaining a special use permit. Second, the concessioner would be authorized to cater food for NPS approved special activities and events such as fund raisers, appreciation days, visitor activities, and events authorized under a Special Use Permit.

Manzanita Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 1 with some additions. This alternative would amend the GMP to allow low-impact lodging to be constructed in the Manzanita Lake area. Forty to sixty tent cabins, yurts or cabins without bathrooms would be constructed in the old campground loop B (See Map 3). The lodging units would be constructed in the former campsites. Existing restrooms in the loop would be remodeled or replaced to accommodate the needs of guests. Electricity to provide lighting for the cabins would be extended through the loop to each cabin. The roads in the loop would be repaved with parking designated for each cabin. The camper services building would be replaced or remodeled and expanded at its current location to accommodate lodging checkin, camper store, showers, laundry and an expanded food service.

Small boat, canoe, or kayak rentals would be available on Manzanita Lake. Rental of recreational equipment such as, skis, snowshoes, and bear proof containers would be authorized.

If and when a gas station were to be operated in close proximity to Manzanita Lake, but outside the park boundary, the gas pumps that are currently located near the camper store could be removed.

Warner Valley and Drakesbad

This alternative would provide the same services and operations at the same levels as described in Alternative 1 with some additions. While this alternative proposes the same basic commercial operation at Drakesbad it does include some operational changes from Alternative 1. The swimming pool and shower facilities would be open to the general public, subject to capacity

and health constraints, with a user fee authorized. Visitors who are not Drakesbad guests would no longer be required to also buy dinner in order to use the pool. The concession would be authorized to offer more spa services in addition to the massage therapy currently offered; however, these services would have to be provided within the existing buildings. Rental of recreational equipment and bear proof food containers would be authorized.

Butte Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 1 with some additions. The sale of limited convenience items from the ranger station would also be authorized. One mobile food service operator would be allowed. This would consist of a van or truck that would enter the campground approximately once or twice per day to offer limited food items and camping supplies to campers at this remote location.

Juniper Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 1 with the addition of sales of limited convenience items from the ranger station.

Summit Lake, Devastated Area parking lot, Kings Creek Picnic Area and Jones Cut

This alternative would authorize a mobile food service, similar to that described above. Also, a small number of winter- use yurts could be erected at the Summit Lake developed area and at the Devastated Area parking/interpretive area for use by cross country skiers (See Map 4). These yurts would be accessible only by skiing in; the road would not be plowed. These two yurt locations would allow skiers to go further into the park and experience the park at night during the winter season without having to bring their own tents or build snow caves. Skiers would then return out of the park the same way they came in. The yurts would provide a basic shelter for overnight use by skiers. There would be no electricity and no running water. Vault toilets would be available for the disposal of human waste; however, all other waste would be required to be packed out.

Parkwide (Concessioner and Commercial Use Authorizations)

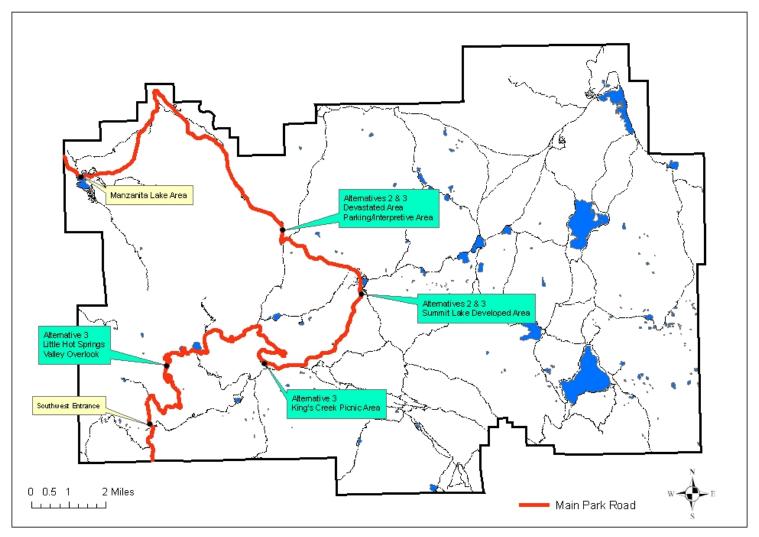
This alternative would provide the same services and operations at the same levels as described in Alternative 1 with some additions. Emergency road services, guided kayaking/canoeing, and a hiker shuttle are activities that would be specifically authorized to be permitted in the park. These activities would be managed either through CUAs or as part of the concession contract. Another addition is that activities not specifically listed and approved in this plan would be reviewed by an interdisciplinary team in the park for their appropriateness before a CUA would be issued. The evaluation form and criteria that would be used are located in Appendix A.

Commercial llama and goat pack trips, bicycle tours and any other activity listed in the Superintendent's Compendium (which is updated annually) would continue to be prohibited.

Main Park Road Reflection Lake Alternative 3 Proposed Lodge Site (Old Budget Cabins Site) Loomis Museum Day Use Area RV Dump Station Manzanita Lake Camper Store Old Loop A Manzanita Lake Campground Atternatives 2 & 3 Proposed Tent Cabins/Yurts (Old Loop B - NowClosed) 0.125 0.25 0.5 Miles

MAP 3 Manzanita Lake Area - Alternatives 2 and 3

MAP 4
Winter Use Ski-In Yurt Locations - Alternatives 2 and 3



Alternative 3

Concept

In this alternative the NPS would take actions that would achieve the desired future conditions identified in this plan. This alternative would authorize a major amount of new services and make changes to existing operations in order to enhance the visitor's experience. This alternative offers increased commercial services over alternative 2.

Southwest Area

This alternative would provide the same services and operations at the same level as described in Alternative 2.

Manzanita Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 2 with one major addition; a full service lodge would be constructed. The new lodge would be constructed within the footprint of the old "budget cabins" area on the south side of Manzanita Creek (See Map 3). The lodge would be one building and would include 40-50 rooms, a full service sit down restaurant, and a parking lot.

Warner Valley and Drakesbad

This alternative would provide the same services and operations at the same levels as described in Alternative 2 with one addition. The concessioner would be allowed to expand the destinations of horse trail rides and lengthen the rides into full- day excursions.

Butte Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 2 with two additions. First, a pack station including a corral and tack and feed storage would be established to provide guided trail rides to visitors. This corral would be no larger than the corral currently located at Drakesbad, the size of which, limits the number of horses that could be used. Second, small non-motorized boat, canoe, and kayak rentals would be available.

Juniper Lake

This alternative would provide the same services and operations at the same levels as described in Alternative 2 with the addition of a pack station and boat rentals. A new corral would be constructed and guided trail rides would be available to visitors. This corral would be no larger than the corral currently located at Drakesbad, the size of which, limits the number of horses that could be used. Small boat, canoe, and kayak rentals would also be available.

Summit Lake, Devastated Area parking lot, Kings Creek Picnic Area and Jones Cut

This alternative would provide the same services and operations at the same levels as described in Alternative 2 with one addition. Winter use ski- in yurts could also be erected at the Kings Creek Picnic Area and the Little Hot Springs Valley Overlook (see map 4). The yurts would be used as overnight points for skiers as they traverse throughout the park along the main park road. The addition of these two yurt areas would allow for skiers to enter through one side of the park (north or south) and exit out the other side of the park, having traversed the entire main park road.

Parkwide (Concessioner or Commercial Use Authorizations)

This alternative would provide the same services and operations at the same levels as described in Alternative 2.

Table 1 - SUMMARY OF ALTERNATIVES

LOCATION	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
		Proposed Action	
Concept	No Action. Continue with existing commercial services as well as those not yet implemented, but already analyzed in the Southwest Visitor Services Facility EA.	This alternative would result in an enhanced visitor experience through a moderate increase in necessary commercial services available to visitors as well as potential for moderate improvements to environmental impacts.	This alternative would provide a full range of commercial services through a major increase in commercial services available to visitors.
Southwest	- Construct the Southwest Visitor Center which includes: a food and beverage service that is a deli/made to order format with indoor and outdoor seating, gift sales, limited grocery and convenience item sales, recreation equipment rentals, and a Lassen Association sales outlet for educational and interpretive materials.	Same as Alternative 1 plus: - Use of the Visitor Center multi purpose room for special events - Catering services for special use groups	Same as Alternative 2
Manzanita Lake	- Camper store with gifts, grocery items, and camping supplies - Limited food and beverage service - gasoline sales - Laundry - Showers - No overnight lodging - Lassen Association educational and interpretive sales at Loomis Museum	Same as Alternative 1 plus: - Limited lodging (tent cabins, cabins without baths, or yurts) located in the old campground loop B - Replace or rebuild the old bathrooms located in the old Loop B Campground - Run electricity to each cabin - Repave the road and parking area for each cabin - Replace or rebuild the camper store building to allow for expanded food service, indoor seating and to accommodate cabin check in - Boat rentals - Recreation equipment rentals - Removal of the gas station	Same as Alternative 2 plus: - Construction of a new full service lodge located within the footprint of the old "budget cabins." This would be 1 building with 40-50 rooms, a full service restaurant and a parking lot.

LOCATION	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
		Proposed Action when and if this service becomes available nearby	
		outside the park boundary.	
Warner Valley/ Drakesbad	- Rustic lodging, food, beverage, - American plan food service for guests and by reservation for others - Sale of snacks, gifts, and convenience items by the concessioner - Pool facilities with massage services available only to Drakesbad guests and those who make dinner reservations - Concessioner offered guided horseback riding - Private horse boarding - Concessioner guided fishing services - Lassen Association sales of educational and interpretive materials at ranger station	Same as Alternative 1 plus: - Pool open to public for fee (without requirement to also pay for dinner), limited by the maximum capacity of the pool Horseback riding limited by corral capacities and on designated trails - Recreation equipment rental - Showers open to general public for a fee - Expanded Spa Services	Same as Alternative 2 plus: - expanded destinations for horse trail rides and extension into full day excursions.
Butte Lake	- Limited sales of Lassen Association educational materials at ranger station	Same as Alternative 1 plus: - Limited sales of convenience items at the ranger station - Mobile food service with limited groceries and convenience items	Same as Alternative 2 plus: - Construction of a corral to support a commercial pack station for guided trail rides - Non- motorized boat rentals
Juniper Lake	- Limited sales of Lassen Association educational materials at ranger station	Same as Alternative 1 plus: - Limited sales of convenience items	Same as Alternative 2 plus: - Construction of a corral to support a commercial pack station for guided trail rides - Non- motorized boat rentals
Summit Lake,	No commercial services	- Two winter use yurt	Same as Alternative
Peak and		areas: one at the	2 plus: Two

LOCATION	ALTERNATIVE 1	ALTERNATIVE 2 Proposed Action	ALTERNATIVE 3
Bumpass Hell parking lots, Devastated area parking		Devastated Area Parking/Interpretive Area and one at the Summit Lake Developed Area - Mobile food/gift sales	additional winter use yurt areas: one at the Kings Creek Picnic Area and one at the Little Hot Springs Valley Overlook
Parkwide – Concessioner and CUA.	 Back Country Ski Tours Bus Tours Guided Art Seminars Guided Backpacking Guided Camping Guided Fishing Guided Hiking Guided Photography Guided Sightseeing Guided Snow Boarding Guided Snowshoeing 	Same As Alternative 1 Plus: - Emergency Road Services - Step on guide service for bus tours - Hiker shuttle - Guided kayaking/ canoeing - Activities not specifically listed and approved in this plan would be reviewed by an interdisciplinary team using the evaluation form in Appendix A	Same as Alternative 2

Impairment Summary Statement

The NPS must consider the impacts of each alternative to determine if the described action would lead to an impairment of resources per the Organic Act and General Authorities Act. If there would be impairment the action may not be approved. An impairment is (the result of) an action that would diminish in strength, value, quality and/or quantity the resources for which the park is responsible. In the context of this document, impairment would be a management action that would harm the integrity of park resources or values, including opportunities that would otherwise be present for the enjoyment of those resources or values. Not all impacts constitute impairment. Severity, duration, and timing of the impact help determine whether the integrity of a park resource or value would be irreparably compromised.

This Environmental Assessment (EA) analyzes the impacts of two alternatives (including the no-action alternative) on the environment in accordance with the National Environmental Policy Act of 1969, Council on Environmental Quality regulations (Title 40 Code of Federal Regulation Part 1500 *et sequentia*), NPS policies, and other relevant laws and regulations.

Impact Topics Analyzed in this Document. Impacts of the alternatives on the following topics are presented in this EA: (1) Soils, (2) Vegetation, (3) wildlife, (4) Archeological Resources, (5) socio- economics, and (6) Visitor Experience.

Impact Topics Dismissed from Further Analysis. The topics listed below either would not be affected or would be affected negligibly by the alternatives evaluated in this EA. Therefore, these topics have been dismissed from further consideration or analysis. Negligible effects are effects that are localized and immeasurable or at the lowest levels of detection.

Prime and Unique Farmlands. None of the alternatives evaluated in this EA would affect prime or unique farmlands, as potentially affected areas are located on NPS property that does not support agriculture.

Air Quality. The Clean Air Act of 1963, as amended, and associated NPS policies require the NPS to protect air quality in parks. Any impacts on air quality would be negligible in a local and regional context.

Floodplains. No projects are proposed for development within floodplains.

Wetlands. Wetland communities, including seeps and springs, are found throughout the Park. Wetlands and wetland vegetation would not be impacted in any of the alternatives evaluated in this EA.

Geologic/Geothermal Resources. Within the park is a diverse array of volcanic resources including composite volcanoes, shield volcanoes, plug dome volcanoes, tephra cones, lava flows, and active geothermal areas. There would be no impacts to thermal features in any of the alternatives evaluated in this EA.

Wilderness. Congress designated 78,982 acres of Lassen Volcanic National Park as wilderness in

October, 1972. The NPS wilderness management policies are based on provisions of the 1916 NPS Organic Act, the 1964 Wilderness Act, and legislation establishing individual units of the national park system. The public purpose of wilderness in national parks includes the preservation of wilderness character and wilderness resources in an unimpaired condition, as well as for the purposes of recreational, aesthetic, scientific, education, conservation, and historical use. Developed areas are excluded from wilderness and the actions evaluated in this EA would not affect wilderness character or values.

Historic Structures. There are no changes proposed under either alternative to any historic structures and thus there would be no impacts.

Cultural Landscapes. Lassen Volcanic National Park has several Cultural Landscapes including ,but not limited to, the Main Park Road and the Drakesbad Guest Ranch. The actions evaluated in this EA would not adversely affect cultural landscapes.

Ethnographic Resources. The Lassen area has been described as a meeting point, or "cultural no man's land", for at least four native groups. Use of the area by the Atsugewi, Yana, Yahi, and northern Maidu groups brought a mix of cultural elements characteristic of central and northeastern California with Great Basin- Plateau elements (Treganza 1963:5).

For groups moving through the area, Lassen Peak provided seasonal resources on its slopes and in the open valleys and lakes that border it. Some of the most important resources include mule deer (*Odocoileus hemionus*), wild sunflower (*Wyethia mollis*), and various tubers. Journey (1970:30) draws a connection between sites where hopper mortars and pestles have been found and the reliance on wild sunflower as a staple in the late prehistoric and protohistoric diet.

Organized groups of Maidu and Atsugewi are currently located to the southeast and north of the Park. There are no organized groups of Yana or Yahi. Although there is a fair amount of written ethnographic data for these American Indian groups, little information about the groups' contemporary use of the Park resources has been obtained. The Park is in the early stages of acquiring and documenting traditional and current use information from the local American Indian communities.

The actions evaluated in this EA would not adversely affect ethnographic resources.

Environmental Justice. The actions evaluated in this EA would not adversely affect socially or economically disadvantaged populations.

Health and Safety. Visitor and employee health and safety would in no way be impacted by any of the alternatives evaluated in this EA.

Environmentally Preferred Alternative

In accordance with Director's Order- 12, *Conservation Planning, Environmental Impact Analysis, and Decision- making*, the NPS is required to identify the "environmentally preferred

alternative" in all environmental documents. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act (NEPA) of 1969, which is guided by the Council on Environmental Quality (CEQ). The CEQ (46 FR 18026 - 46 FR 18038) provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101", which considers

- fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
- assuring for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserving important historic, cultural and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
- achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA Section 101(b)).

Generally, these criteria mean the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038).

As described in this Environmental Assessment, the proposed action is also the environmentally preferred alternative. After review of potential resource and visitor impacts, the proposed action achieves the greatest balance between providing the necessary commercial services and protecting the park's resources.

Alternatives Considered and Rejected

The NPS considered options to the American plan dining service at Drakesbad such as broader menu choices, use by the general public without reservations, and not requiring participation by lodge guests who would then pay a reduced lodging rate. These options were rejected due primarily to facility constraints and safety issues. To have broader menu choices and be open to the general public without reservations, kitchen and storage facilities would have to be substantially expanded. It would also require additional staffing with associated issues such as staff housing. Allowing non- participation in the American plan by lodge guests would require renovating some lodge units with kitchens and/or allowing the use of cook stoves in lodge units which has associated safety issues.

The addition of bicycle tours was considered but rejected due to safety concerns. All the roads within Lassen Volcanic National Park are narrow and curvy; therefore, large groups of bicycles moving slower than the traffic around them presents a danger to the cyclists and the vehicle

traffic.

Expanding services at the southwest area of the park, including lodging, showers and laundry also was considered. It was determined that these services were already available nearby (in the Mineral community), and that they were not necessary within this area of the park.

The addition of seasonal tent cabins at Juniper Lake was considered and rejected due to the potential for significant environmental impacts to Juniper Lake. There are currently no utilities in this area and adding the necessary utilities (a leach field, water lines, electricity) to support tent cabins, would require a significant amount of new ground disturbance. The logistics of running a lodging operation and the short season available in this area also make the cabins financially impractical.

Another site was considered for the tent cabins under Alternative 2. This site was east of the campground at Manzanita Lake. This site was ultimately dismissed due to the fact that it has not been previously disturbed, and other sites that have been previously disturbed were available that would result in fewer environmental impacts to the area.

The construction of a dog kennel was considered but rejected. While the availability of a kennel would be a benefit to some visitors, the noise, upkeep, and lack of an appropriate location made this alternative impractical.

ENVIRONMENTAL CONSEQUENCES

Concept of Impact Analysis

The National Environmental Policy Act (NEPA) requires that environmental documents disclose the environmental impacts of the proposed federal action, reasonable alternatives to that action, and any adverse environmental effects that cannot be avoided should the proposed action be implemented. This section analyzes the environmental impacts of two project alternatives on soils, visitor experience, health and safety, and socio- economics. These analyses provide the basis for comparing the effects of the alternatives. NEPA requires consideration of context, intensity and duration of impacts, indirect impacts, cumulative impacts, and measures to mitigate impacts. In addition to determining the environmental consequences of the preferred and other alternatives, NPS *Management Policies* (NPS, 2006) and Director's Order-12, *Conservation Planning, Environmental Impact Analysis, and Decision- making*, require analysis of potential effects to determine if actions would impair park resources.

The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid or minimize to the greatest degree practicable adverse impacts on park resources and values. However, the laws do give the NPS management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgement of the responsible NPS manager, would harm the integrity of park resources or values, including opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may constitute an impairment. However, an impact would more likely constitute an impairment to the extent it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the Park's General Management Plan or other relevant NPS planning documents.

Definition of Terms

Type of Impact

Adverse impacts are those that change the affected environment in a manner tending away from the natural range of variability.

Beneficial impacts are those that change the affected environment toward the natural range of variability.

Context of Impact

Direct impacts include such impacts as animal and plant mortality, damage to cultural resources, or creation of smoke, that occur at the time and place of the action.

Indirect impacts are those that occur at a different time and/or place than the action. Indirect impacts include changes such as species composition, structure of the vegetation, or range of wildlife. Indirect impacts also include impacts that occur off- site such as erosion- related impacts, or general economic conditions tied to park activities.

Cumulative impacts are those impacts on the environment that result from the incremental (i.e., additive) impact of direct and indirect impacts when added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Duration of Impact

Duration is a measure of the time period over which the effects of an impact persist. The duration of impacts evaluated in this EA may be one of the following:

Short term impacts are those that can be reversed relatively quickly. Short term impacts typically occur only during implementation and last less than one year; or

Long term impacts are those that are reversed more slowly. Long term impacts last one year or longer.

Intensity of Impact

Intensity is a measure of the severity of an impact. The intensity of an impact may be:

negligible, when the impact is localized and not measurable or at the lowest level of detection;

minor, when the impact is localized and slight but detectable;

moderate, when the impact is readily apparent and appreciable; or

major, when the impact is severe and highly noticeable.

Analysis of Impacts

The impacts from the Southwest Visitor Center have already been assessed in a separate Environmental Assessment (NPS 2004), for which there was an approved Finding of No Significant Impact (FONSI). The impacts to special status species were also assessed in that EA and the U.S. Fish and Wildlife Service concurred with the Park's finding of "not likely to adversely effect" for these species. Therefore, the impacts resulting from the Southwest Visitor Center will not be analyzed in this document.

Soils

Affected Environment

The soils within Lassen Volcanic National Park are generally rocky, shallow, rapidly drained and strongly acidic. They are almost exclusively volcanic in origin. Depths vary from several feet in limited lower elevation meadows to thin or nonexistent in the higher elevations. Because of their rock porous nature, the soils are rather resistant to erosion. However, soil erosion does occur in conjunction with some heavily used trails.

Soils in the Warner Valley area that support commercial horse rides are volcanic in origin as elsewhere in the park and vary in depth from thin layers in higher elevation areas or on exposed ridges to deeper well formed soils along the valley floor.

Detailed soil information comes from a few small development projects and is site specific. A comprehensive soil survey has never been completed for the entire park. However, a park- wide soil survey was started by the Natural Resource Conservation Service in the summer of 2006 and will continue in the summer of 2007.

Impacts on Soils for Alternative 1 (No Action)

The no- action alternative would continue to have a minor long- term negative effect on soils. The only impacts on soils as result of commercial services are from compaction due to concentrated visitor use in developed areas and from the use of horses on trails in the Drakesbad area.

<u>Cumulative Impacts</u>. The primary adverse soil impacts occurring as a result of other past and ongoing actions are compaction and erosion, resulting from development and concentrated visitor use in the Park, and the existence of a number of abandoned sites where soils have been disturbed and revegetation has not been undertaken. In the summer of 2003, the old abandoned downhill ski area adjacent to the site of the future Southwest Visitor Center was restored by removing old concrete footings, obliterating old service roads and revegetating the area. Also in the summer of 2003, half of the main park road was overlayed with new asphalt. The other half of the main park road is scheduled to be overlayed with new asphalt in the next few years. In 2007 construction will

begin on a new Visitor Center at the Southwest Area. This construction takes place in a previously disturbed site, where a large parking lot was situated. Also in 2007, the second half of the main park road will be overlayed and several areas will see improvements made. These projects contributed and will contribute to both beneficial and adverse impacts to soils. From a parkwide standpoint the amount of area affected by past and possible future projects is not substantial and soil impacts are relatively minor. Impacts from the above actions, together with the impacts of the no- action alternative, would result in minor adverse cumulative impacts to soils in the Park. The no- action alternative would contribute a negligible, long- term, adverse increment to total cumulative effects on soils in the Park.

<u>Conclusion.</u> The no- action alternative would have a minor, long- term, adverse effect, but would not impair soils.

Impacts on Soils for Alternative 2 (Preferred)

The preferred alternative would add 40-60 tent cabins or yurts to the old Loop B of the Manzanita Lake campground. This site was previously disturbed, as it served as a campground from until 1973. The return of visitor use to the area would result in a minor, long-term adverse effect to soils. There would be no impact from the winter- use yurts at the Devastated Area and the Summit Lake developed area because the yurts would be located in previously disturbed areas and there would be a significant amount of snow over any nearby exposed soils.

<u>Cumulative Impacts</u>. The primary cumulative adverse soil impacts are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of the preferred alternative, would result in minor adverse cumulative impacts to soils in the Park.

<u>Conclusion.</u> The preferred alternative would have a minor, long- term, adverse effect, but would not impair soils in the Park.

Impacts on Soils for Alternative 3

Alternative 3 would add a new full service lodge with 40-50 rooms, a restaurant, and a parking lot. This site was previously disturbed, as it served as the site of the old "budget cabins" until 1973. The return of visitor use to the area would result in a minor, long- term adverse effect to soils and construction activities would result in minor, short- term adverse effects. Expanding the destinations and duration of horse rides at Drakesbad would have a minor adverse long-term effect on soils, as would the addition of horse corrals at Butte and Juniper Lakes. The number of horses that could be used is limited by the size of the existing corral at Drakesbad; therefore, the impacts would be minimal. In addition, there is a limit (15 animals per group) to the number of horses permitted on a trail per the Superintendent's Compendium. There would be no impact from the winter- use yurts at the Kings Creek Picnic Area and the Little Hot Springs Valley Overlook because the yurts would be located within paved parking areas and there would be a significant amount of snow over any nearby exposed soils.

<u>Cumulative Impacts</u>. The primary cumulative adverse soil impacts are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of alternative 3, would result in minor adverse cumulative impacts to soils in the Park.

<u>Conclusion</u>. Alternative 3 would have a minor, long-term, adverse effect, as well as a minor short-

term adverse effect, but would not impair soils in the Park.

Vegetation

Affected Environment

Most of the park below 7,900 feet (2,400 meters) is forested, with the distribution of conifers affected by elevation. Red fir (*Abies magnifica*) and lodgepole pine (*Pinus contorta var*. *murrayana*) dominate upper elevations (6,900-7,900 feet or 2,100-2,400 meters), whereas white fir (*Abies concolor*) and Jeffrey pine (*Pinus jeffreyi*) are most abundant at lower elevations (<6,900 feet or 2,100 meters). Limited stands of mountain hemlock (*Tsuga mertensiana*) occur at treeline generally above 7,900 feet or 2,400 meters.

Although most of the park is forested, a great percentage is also rocky, exposed and relatively devoid of vegetation.

Four major plant communities are found within the park, including yellow pine forest, red fir forest (including the intermediate lodgepole pine forest), subalpine forest and alpine fellfields. Minor plant communities include montane chaparral or brush lands and herbaceous wet meadows as well as localized riparian areas (dominated by willows and alders along water courses and aspens in moist areas at low elevations.

Red Fir Forest: Red fir forest is the most widespread forest type in the park and is a common upper montane forest type throughout the Sierra Nevada and in the southern Cascades. In the Park, red fir forest is found between 6,500 and 8,000 feet or 2,400 and 2,900 meters and covers some 35,000 acres, about one third of the Park. In red fir forests, red fir (*Abies magnifica*) is the sole dominant tree in the canopy, but lodgepole pine (*Pinus contorta* ssp. *murrayana*), Jeffrey pine (*Pinus jeffreyi*), mountain hemlock (*Tsuga mertensiana*), sugar pine (*Pinus lambertiana*), western white pine (*Pinus monticola*) or white fir (*Abies concolor*) may be present in small numbers. Mature red fir is commonly 60 to 120 feet or 22- 44 meters tall and lives over 300 years. Shrubs and flowers include arrowleaf balsamroot (*Balamorhiza saggittata*), mule's ear (*Wyethia mollis*) and greenleaf (*Arctostaphylos patula*) and pinemat (*A. nevadensis*) manzanita.

Depending on soil type and elevation, mountain hemlock may be a component of either the Red Fir Forest or the Subalpine Forest. Mountain hemlock is usually found on nutrient- poor sites with coarser textured soils than red- fir dominated sites (Parker 1991). The pre- successional lodgepole pine stands often occur between 6,200 and 7,500 feet or 1,900 and 2,300 meters and are most common on flat, valley bottom sites or lower slopes, often near the margins of meadows and lakes.

Yellow Pine Forest: This forest type is found below 6,000 feet (1,900 meters) usually with a mix of species including sugar pine (*Pinus lambertiana*), Jeffrey pine, white fir, ponderosa pine (*Pinus ponderosa*), western white pine, incense cedar (*Calocedrus decurrens*) and even red fir. The soils associated with these forest types have significantly higher potassium, calcium, and magnesium than most other Lassen Park forest types (Parker 1991).

Subalpine Forest: The subalpine forest, at the upper end of the park's coniferous forests in

elevation (above 8,500 feet or 3,100 meters) is dominated by mountain hemlock and whitebark pine (*Pinus albicaulis*), a highly weather resistant pine that may grow as high as 10,000 feet or 3,600 meters. Shrubs and flowers include currants (*Ribes* sp.), willow (*Salix* sp.), lupine (*Lupinus* sp.), senecio (*Senecio* sp.), pearly everlasting (*Anaphalis margaritacea*), rubber rabbitbrush (*Chrysothamnus nauseosus*), and pine mat manzanita (*Arctostaphylos nevadensis*).

Alpine Meadows and Fellfields: These areas, located above timberline, are carpeted with colorful wildflowers, including spreading phlox (*Phlox diffusa*), phacelia (*Phacelia* sp.), stonecrops (*Sedum* sp.), alpine saxifrage (*Saxifraga tolmei*), cinquefoils (*Potentilla* sp.), penstemons (*Penstemon* sp.), alpine daisy (*Erigeron compositus*), and buckwheats (*Eriogonum* sp.).

Montane Chaparral or Brushland: Pinder *et al.* (1997) found that most chaparral species in the park occur below 7,500 feet (2,300 meters) on relatively dry sites. These scattered shrub fields, which comprise approximately 10 percent of the park are dominated by greenleaf and pinemat manzanita (*Arctostaphylos patula and A. nevadensis*), snowbrush ceanothus (*Ceanothus velutinus*), and bush or California chinquapin (*Castanopsis sempervirens*) as well as currant (*Ribes* sp.), gooseberry (*Ribes* sp.), serviceberry (*Amelanchier* sp.), bitter cherry (*Prunus* sp.).

Wet and Dry Meadows: Herbaceous communities are scattered throughout the park and range from densely vegetated, wet meadows near seeps, streams and lakes to ephemeral ponds. Plant communities vary from grass and grass-like species including sedges (*Carex spp.*), and perennial grasses, including Thurber's bentgrass (*Agrostis thuberiana*), tufted hairgrass (*Deschampsia caespitosa*), and Pullup muhly (*Muhlenbergia filiformis*) (Taylor 1990b); to less densely vegetated areas composed of mostly broad-leaved plants such as satin lupine (*Lupinus obtusilobus*), mule's ears, sagebrush (*Artemisia douglasiana*), and mountain alder (*Alnus tenuifolia*) that occur on steep slopes or in larger gaps within forested areas (Pinder *et al.* 1997). Forbs include monkeyflower (*Mimulus* sp.), bog laurel (*Kalmia* sp.), California corn lily (*Veratrum californicum*), alpine shooting star (*Dodecatheon alpinum*) and lupine.

Impacts on Vegetation for Alternative 1 (No Action)

The no-action alternative would result in a negligible, long-term adverse effect on vegetation due to visitor use.

Cumulative Impacts.

Relatively small patches and corridors of vegetation have been lost in the Park in areas that have been developed for facilities, trails, and roads. Furthermore, human activities, including fire suppression, have altered the structure and composition of forest vegetation. A new fire management plan, however, is now being implemented at the park, which calls for a responsible management strategy that will slowly return fire to the park, in order to make the forests healthier. Furthermore, the new fire management plan calls for the thinning of white fir trees throughout the Manzanita Lake campground, Crags Campground, and Lost Creek Campground in order to improve the health of these now over- crowded forests. The moderate beneficial impacts from the above actions, in combination with the negligible adverse impacts of the no- action alternative, would result in overall moderate beneficial cumulative effects on vegetation.

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The no- action alternative would have a negligible, long- term adverse effect on vegetation and would not constitute an impairment on vegetation.

Impacts on Vegetation for Alternative 2 (Preferred)

The preferred alternative would result in minor, long- term adverse effects on vegetation. The addition of tent cabins or yurts would result in increased visitor use in the Old Loop B campground. More people concentrated in the area and increased camping could result in minor impacts to the vegetation. There would also be a minor, short- term adverse effect to vegetation. There would be a need to do some minor removal of vegetation in order to clear the spaces for the cabins. This area has been free of overnight visitor use for over 30 years and as such, some vegetation has grown in the areas where the cabins would be placed. The clearing of vegetation for the tent cabins or yurts would be minimal, however. This is due to the fact that the fir trees in the Manzanita Lake Campground area are scheduled to be thinned for forest health and fire management reasons, as is outlined in the Fire Management Plan, prior to the implementation of the activities outlined in this plan.

Ground disturbance could potentially introduce non- native plant species if the equipment is contaminated and/or expose a pre- existing seed bank. The potential for non- native plant species introduction will be decreased with the implementation of the mitigations listed at the end of this chapter.

<u>Cumulative Impacts</u>. The primary cumulative impacts to vegetation are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of the preferred alternative, would result in minor beneficial cumulative impacts to vegetation in the Park.

<u>Conclusion.</u> The preferred alternative would have a minor, long-term, adverse effect, but would not impair vegetation in the Park.

Impacts on Vegetation for Alternative 3

Alternative 3 would result in a minor, long- term adverse effect on vegetation. The addition of a lodge at Manzanita Lake would result in increased visitor use in the area. Having more people concentrated in the area, could result in minor impacts to the vegetation. There would also be a minor, short- term adverse effect to vegetation. There would be a need to do some minor removal of vegetation in order to clear the area for the lodge and the parking lot. This area has been free of overnight visitor use for over 30 years and as such, some vegetation has grown in the area. The clearing of vegetation would be minimal. Even though the site had a major beetle-caused tree kill several years ago, many young seedlings have begun to grow and would need to be removed.

<u>Cumulative Impacts</u>. The primary cumulative impacts to vegetation are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of alternative 3, would result in minor beneficial cumulative impacts to vegetation in the Park.

<u>Conclusion.</u> Alternative 3 would have a minor, long- term, adverse effect, but would not impair vegetation in the Park.

Wildlife

Affected Environment

More than 260 native species of terrestrial and aquatic animals have been recorded in the park area, including 61 species of mammals, 138 species of birds and 15 species of amphibians and reptiles. Another three occurred historically but have not been documented recently, including the great gray owl, wolverine and Pacific fisher. Little is known about the distribution and abundance of most wildlife species.

Small mammals include the deer mouse, five species of shrew, Allen's and yellow- pine chipmunk, Douglas squirrel, flying squirrel, golden- mantled ground squirrel, yellow- bellied marmot and pika. Small and medium- sized carnivores include the long- tailed weasel, pine marten, raccoon, striped skunk, river otter, bobcat, red fox and coyote. Large mammals include the black bear, black- tailed deer and mountain lion. In addition, seven species of bats occur in the park.

Of the birds approximately 80 species are known to nest in the park. Raptors include the northern goshawk, Cooper's hawk, red-tailed hawk, sharp- shinned hawk, peregrine falcon, golden eagle, bald eagle, northern saw- whet owl, spotted owl, great horned owl, and northern pygmy owl. Other bird species include the gray jay, Clark's nutcracker, red- breasted sapsucker, common flicker, pileated woodpecker, Steller's jay, Oregon junco, warbling vireo, Audubon's warbler, Wilson's warbler, hermit warbler, fox sparrow, and song sparrow.

Amphibians include the western toad, Pacific tree frog, Cascades frog and long- toed salamander. Reptiles include the western terrestrial garter snake, northern alligator lizard, rubber boa and sagebrush lizard.

Although most park lakes are naturally barren, four native species of fish occur in the park, including rainbow trout, Tahoe sucker, tui chub and Lahontan redside. In addition ,there are a number of introduced fish, including brook trout (*Salvelinus fontinalis*) and brown trout (*Salmo trutta*). Stocking of hatchery- reared rainbow and brown trout occurred from the park's establishment until 1992.

Manzanita Lake fishery has been state designated as a "blue ribbon" fishery. The lake contains rainbow trout, brown trout and brook trout. Fishing at Manzanita Lake is catch and release and angler surveys are conducted annually. Manzanita Creek is closed to fishing. Lost Creek, Hat Creek, and Kings Creek have populations of non-native brook trout.

The park also contains a wide variety of known and unknown invertebrates, including insects, spiders and worms.

Federally Threatened and Endangered Species.

Species	Federal Status
Bald Eagle (Haliaeetus leucocephalus)	Threatened
California Red Legged Frog (Rana aurora	Threatened
draytonii)	
Delta Smelt (Hypomsus transpacificus)	Threatened
Central Valley Steelhead (Oncorhynchus	Threatened
mykiss)	
Winter Run Chinook Salmon (Oncorhynchus	Endangered
tshawytscha)	
Shasta crayfish (Pacifastacus fortis)	Endangered
Central Valley spring- run chinook salmon	Threatened
(Oncorhynchus tshawytscha)	
Vernal pool invertebrates	Critical habitat

Bald Eagle. The bald eagle is the only listed species known to occur within Lassen Volcanic National Park. Bald eagles build their nests in trees greater than 30 inches in diameter, within a ¼ - ½ mile from a fish- providing water source. Because of scarce food supply and relatively harsh nesting season climatic conditions, the park has extremely marginal bald eagle nesting habitat. There is one known bald eagle nesting pair in Lassen Volcanic National Park at Snag Lake. This pair along with a nest was discovered in 1980. This nest was monitored until 2001 when the nest tree fell over during the winter of 2000/2001. This pair of bald eagles has been monitored annually from 2002 to the present. The pair has been observed at Snag Lake in subsequent years but no new nest has been found and no young bald eagles have been observed. Surveys are currently being conducted to locate a new nest in the Snag/Butte Lake area. Hunting territory for this pair comprises most of the eastern half of the park. The only other known bald eagle activity in the park is seasonal foraging use of the Manzanita Lake area by eagles believed to nest at McCumber Reservoir outside of the park.

The other seven federally listed species described below have not been found in Lassen Volcanic National Park and suitable habitat does not exist in the areas proposed to have increased activity in this EA.

<u>California Red-legged Frog.</u> This species has not been positively identified within Lassen Volcanic National Park. It inhabits elevations from sea level to about 5,000 feet. Nearly all of the known occurrences are from below 3,500 feet. California red-legged frogs spend most of their lives in and near sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Deep pools with dense stands of overhanging willows and an intermixed fringe of cattails are considered optimal habitat.

<u>Delta Smelt and Central Valley steelhead</u>. These species occur or spawn in the Sacramento River and its tributaries. No streams within Lassen Volcanic National Park have been found to

support these species.

<u>Winter- run Chinook Salmon</u>. This species is found only in the upper Sacramento River. No streams within Lassen Volcanic National Park have been found to support this species.

<u>Central Valley Spring- run Chinook Salmon.</u> This species is found within the Sacramento River and its tributaries – Butte, Big Chico, Deer, and Mill creeks. These salmon enter the Sacramento River between February and June. They move upstream and enter the tributaries between February and July, peaking in May and June, where they stay in pools until spawning occurs in mid- August to mid- October (September peak). There are no current records of spring- run chinook salmon within the section of Mill Creek that is within Lassen Volcanic National Park.

<u>Shasta crayfish</u>. This species is only known from Shasta County in lower elevation waters outside of Lassen Volcanic National Park where they inhabit cool, clear, spring- fed lakes, rivers, and streams and most are found in still and moderately flowing waters.

<u>Vernal pool invertebrates.</u> Vernal pools are seasonally flooded shallow depressions in grasslands that have hardpan, clay or volcanic soils that prevent water penetration. These depressions fill with water in the rainy season and dry out as the summer progresses. Several species of invertebrates (some listed as threatened or endangered) live and breed in these pools. There are no vernal pools within the areas proposed to have increased activity in this EA.

Candidate Species

<u>Green sturgeon (*Acipenser medirostris*).</u> The green sturgeon is known only from the Klamath River. No evidence of this species has been found within Lassen Volcanic National Park.

<u>Central Valley fall/late fall- run chinook salmon (*Oncorhynchus tshawytscha*).</u> The Central Valley fall/late fall- run chinook salmon is found only in the central valley of California. No evidence of this species has been found within Lassen Volcanic National Park.

<u>Pacific fisher (Martes pennanti pacifica)</u> are believed to be extirpated from Lassen Volcanic National Park and typically avoid areas with human activity and development.

Species of Concern

Seven bats have been identified by the USFWS and California as likely to occur in the park – pale Townsend's big- eared bat (*Corynorhinus* (=Plecotus) townsendii pallescens), spotted bat (*Euderma maculatum*), small- footed myotis (*Myotis ciliolabrum*), fringed myotis (*Myotis thysanodes*), long- legged myotis (*Myotis volans*), Yuma myotis (*Myotis yumanensis*), and long-eared myotis (*Myotis evotis*). Only the latter four, however, have been positively identified in the park. These species likely depend on late successional old- growth forest, where they roost beneath loose bark or in cavities. Other landscape features more commonly associated with day roosts, hibernacula, and maternity colonies (such as significant lava tubes, caves, and abandoned mines) are largely absent from the park. Cliff and rock slopes are also possible habitat areas.

<u>California wolverines (Gulo gulo luteus)</u> are believed to be extirpated from Lassen Volcanic National Park and typically avoid developed areas. Surveys for this species have occurred throughout the State over the past 10 years with no confirmed detections statewide.

<u>Sierra Nevada snowshoe hare (Lepus americanus tahoensis)</u> occur in thickets of brush, pine, fir, and riparian vegetation within Lassen Volcanic National Park.

<u>Pygmy rabbit (Brachylagus idahoensis)</u> is associated with tall, dense, large- shrub stages of big sagebrush, greasewood, and rabbitbrush. This species does not occur in Lassen Volcanic National Park.

<u>American marten (Martes americana)</u>. Martens require a variety of different aged stands, particularly old growth conifers and snags which provide cavities for denning and nesting. This species is found in the old growth areas of Lassen Volcanic National Park.

Sierra Nevada red fox (*Vulpes vulpes necator*) (California endangered). generally occur above 5,000 feet in forest and fell fields but may visit lower elevation areas as well in summer. There are currently no known den sites and most of the sightings have been in developed areas along the main park road within Lassen Volcanic National Park. This species is known to beg at parking areas and campgrounds throughout the park. A study was done on this species with Lassen Volcanic National Park and surrounding areas from 1997 to 2004. Five Sierra Nevada red foxes were captured and radio collared with this project. During the study, three of the collared red foxes died. Two of natural causes and one was fatally wounded by a domestic dog attack. Since the study, the batteries in the radio collars on the remaining foxes have died so the location and status of these foxes is unknown. There was one sighting of a red fox within Lassen Volcanic National Park in 2005 but there were no sightings in 2006.

American peregrine falcon (*Falco peregrinus anatum*) (California endangered). There is one known peregrine falcon nest (monitored annually by park staff since 1997) located on U.S. Forest Service land bordering Lassen Volcanic National Park's western boundary (Blue Lake Canyon). Peregrine falcons can be seen hunting in the higher elevations around Lassen Peak in the late summer and early fall as well.

<u>California spotted owl (Strix occidentalis occidentalis)</u> This species is associated with multistoried coniferous forests with greater than 70% canopy cover and large trees (>30 inches in diameter) used for nesting. There are currently three known nesting pairs and two pairs that have been confirmed as non-nesting in Lassen Volcanic National Park. The three nests are located on the north side of Prospect Peak, the south side of Prospect Peak, and Terminal Geyser. The two non-nesting pairs are located across for Crags Campground and in Warner Valley.

<u>Western burrowing owl (Athene cunicularia hypugaea).</u> This species is a small ground nesting bird of prairie and grassland habitats. They depend upon burrows made from other animals to nest. There have been no sightings of this species with Lassen Volcanic National Park.

<u>Flammulated owl (Otus flammeolus)</u>. This species is found in coniferous forests in the Sierra Nevada and Cascade ranges. It nests in cavities or woodpecker holes below the elevation of the park. This species has not been documented within Lassen Volcanic National Park.

<u>Greater sandhill crane (Grus canadensis)</u> (<u>California threatened</u>). This species is found in wetland habitats such as meadows, pastures, grain fields, bogs, fens, marshes and fields. There

have been sightings in Kings Creek Meadow, Snag Lake, Horseshoe lake, and Warner Valley in Lassen Volcanic National Park although no reproduction has been confirmed. Most sightings of this species is in the fall when they are seen flying over Lassen Volcanic National Park during migration.

<u>Little willow flycatchers (Empidonax traillii brewsteri)</u> (California endangered). This species nests in dense willow thickets in montane meadows and along streams. Records indicate this species historically bred in Sulfur Creek Meadows and around Snag Lake in Lassen Volcanic National Park. This species is currently found in the Warner Valley area of Lassen Volcanic National Park where a breeding pair was discovered in 2004.

<u>Rufous hummingbirds</u> (*Selasphorus rufus*). This species does not breed in Lassen Volcanic National Park but are found in the park during spring and fall migration. They are found in open meadow areas where they forage on wildflower nectar.

<u>Lawrence's goldfinch (Carduelis lawrencei).</u> This species requires open woodland or shrubland, a nearby source of water, with forbs and shrub seeds. This species has only been documented in Warner Valley (one dispersing juvenile in 2004) and habitat for this species does not exist within Lassen Volcanic National Park.

<u>Vaux's swift (Chaetura vauxi).</u> This species requires hollow trees and snags for nesting and roosting. It shows an apparent preference for foraging over rivers and lakes. It has been documented in Lassen Volcanic National Park.

<u>Black swift (Cypseloides niger)</u>. This species requires moist locations on cliffs behind or adjacent to water falls in deep canyons. This species has been documented in Lassen Volcanic National Park.

<u>American dipper (*Cinclus mexicanus*)</u>. This species requires clear fast- moving water. It is confined to clear, clean streams and rivers with rocky shores and bottoms in mountains. This species does occur in Lassen Volcanic National Park.

<u>Lewis' woodpecker (Melanerpes lewis)</u>. Lewis' woodpeckers are found in dry open woodlands, orchards, farmlands, and foothills. This species requires open habitats with scattered trees and snags with cavities. This species has been documented in Lassen Volcanic National Park.

<u>Tricolored blackbird (Agelaius tricolor).</u> This species is found in the central valley of California and seeks cover in emergent wetland vegetation. It nests in dense cattails or tules. There is only one record for this species in Lassen Volcanic National Park at Manzanita Lake.

Oak titmouse (*Baeolophus inornatus*). This bird prefers woodland habitat in which oaks predominate. This species has not been recorded in Lassen Volcanic National Park.

<u>Loggerhead shrike</u> (*Lanius ludovicianus*.). This species prefers open habitats in lowlands and foothills with scattered shrubs, trees, posts, fences which are used as perches. This species has not been recorded in Lassen Volcanic National Park.

<u>Long-billed curlew (Numenius americanus).</u> This species is found in estuaries along coastal areas and wet meadow habitat in northeastern California. This species has not been

documented in Lassen Volcanic National Park.

<u>Prairie falcons (Falco mexicanus)</u> require sheltered cliff ledges for cover. There are historic breeding records of this species at Eagle Peak.

Northwestern pond turtles (*Clemmys marmorata marmorata*) use slow streams, ponds, lakes, and wetlands and associated uplands from sea level to 6,000 feet. This species has been documented historically in Lassen Volcanic National Park in the Manzanita Lake, Reflection Lake area. There have been no recent sightings of this species in Lassen Volcanic National Park.

<u>Foothill yellow- legged frogs (Rana boylii)</u>. This species is found in or near rocky streams in a variety of habitats from sea level to 6,000 feet. There is one specimen in the Lassen Volcanic National Park museum, however, it is unclear whether this species came from the park. There have been no recent sightings of this frog in the park. It is believed this species does not occur in Lassen Volcanic National Park due to its elevational limits.

<u>Cascades frog (Rana cascadae)</u>. This species inhabits lakes and meadows in the park. Numerous amphibian studies have shown this species to be declining throughout the Sierra Nevada and Cascade ranges. A fish and amphibian survey during the summer of 2004 found this species to occupy some of the ponds in the Juniper Lake area.

<u>Eagle Lake rainbow trout (Oncorhynchus mykiss auilarum).</u> This species is endemic to Eagle Lake in Lassen County. It is used in planting programs by the State of California and may be one of the species planted in the past for recreational fishing in Manzanita Lake.

<u>Rough sculpin (*Cottus asperrimus*)</u> This species is found in the Pit River, Fall River and Hat Creek. There have been no observations of this species in Lassen Volcanic National Park.

<u>Pit roach (Lavinia symmetricus mitrulus).</u> This species is found in the Pit River and does not occur in Lassen Volcanic National Park.

<u>Longfin smelt (Spirinchus thaleichthys).</u> This species is found along the Sacramento and San Joaquin estuaries and does not occur in Lassen Volcanic National Park.

<u>Sacramento splittail (Pogonichthys macrolepidotus).</u> This species occurs in the Sacramento River and its tributaries and is not found within Lassen Volcanic National Park.

Impacts on Wildlife for Alternative 1 (No Action)

Human presence, horse presence, and vehicular traffic resulting from the no-action alternative would result in negligible, long-term adverse impacts on wildlife.

<u>Federally Threatened and Endangered Species</u>

The bald eagle is the only listed species that occurs in the park. Bald eagles use Manzanita Lake and Manzanita Creek as foraging grounds all year. There would be no change in the way bald eagles use this area under this alternative. They will continue to forage with the current level of human disturbance. This alternative is not likely to adversely effect bald eagles.

There would be no effect on any other Federally listed species from this alternative due to the lack of these species to occur within the park or within the areas proposed to have increased activity in this EA.

Candidate Species

There would be no effect on any candidate species from this alternative due to the lack of these species to occur in the park.

Species of Concern

Of all the species of concern listed there are 19 that occur within the park. Under this alternative, there would be no new adverse impacts on any species of concern.

Cumulative Impacts.

The combined effects of development in the park and in the surrounding area over time coupled with the purposeful eradication of many predator species during the 1800s and early 1900s have contributed to low level or extirpated wildlife populations of some key species in the park. While there are no major development projects planned for the park that would result in additional cumulative effects to wildlife, the cumulative effects of existing development continue to take a toll on wildlife from the effects of collisions on the road as well as from occasional wildlife- human interactions. Actions proposed under the no- action alternative would contribute a negligible long- term adverse effect on wildlife.

Conclusion

The no- action alternative would have a negligible, long- term adverse effect on wildlife and would not constitute an impairment on wildlife.

Impacts on Wildlife for Alternative 2 (Preferred)

The preferred alternative would result in minor, long-term adverse effects on wildlife. The addition of tent cabins or yurts would result in increased visitor use in the Old Loop B campground. Having more people concentrated in the area and camping overnight, would result in negligible impacts to wildlife, as this is already a heavily used visitor area. There would also be a negligible, short-term adverse effect to wildlife. There would be a need to do some minor removal of vegetation (habitat for some small animals) in order to clear the spaces for the tents, yurts, or cabins. The clearing of vegetation which serves as habitat would be minimal due to the thinning project for forest health that will take place prior to the implementation of this project.

Federally Threatened and Endangered Species

Along with the addition of tent cabins or yurts in the Old Loop B campground there will also be rental of small boats, canoes or kayaks with this alternative. Manzanita Lake is already heavily used by fishermen using float tubes (belly boats) and small boats for fishing. Due to the already heavy use by fisherman, the addition of more small boats or canoes is not likely to adversely effect bald eagles.

There would be no effect on any other Federally listed species from this alternative due to the lack of these species to occur within the park or within the areas proposed to have increased activity in this EA.

Candidate Species

There would be no effect on any candidate species from this alternative due to the lack of these species to occur in the park.

Species of Concern

Of all the species of concern listed there are 19 that occur within the park. The effect of this alternative on these species is listed below.

<u>Long-legged myotis (Myotis volans)</u>, Yuma myotis (Myotis yumanensis), fringed myotis (Myotis thysanodes), and long-eared myotis (Myotis evotis). These species likely depend on old-growth forest, where they roost beneath loose bark or in cavities. It is expected that no habitat loss would occur with this alternative. Due to the already high level of disturbance in the area there would be negligible effects on these species with this alternative.

<u>Sierra Nevada snowshoe hare (*Lepus americanus tahoensis*)</u>. This species may be present within the project area. With this alternative there would be no habitat modification for this species and the project area already lies in an area with a current high level of disturbance. There would be negligible effects on snowshoe hare from the activities proposed in this alternative.

<u>American marten (*Martes americana*)</u>. This species is found in the old growth areas of the park. Suitable habitat would not be affected by actions proposed in this alternative. There will be negligible effects on American marten from the activities proposed in this alternative.

<u>Sierra Nevada red fox (*Vulpes vulpes necator*) (California endangered)</u>. This species has been known to beg for food in developed areas within Lassen Volcanic National Park. With the addition of yurts in the winter and more tent cabins at Manzanita Lake, there will be increased begging opportunities for this species which could lead to increased fox/human incidents. This could lead to having minor adverse effects on this species with this alternative.

American peregrine falcon (*Falco peregrinus anatum*) (California endangered). Due to lack of habitat within the project area there will be no effect on this species with this alternative.

<u>California spotted owl (Strix occidentalis occidentalis</u> Due to lack of habitat within the project area there will be no effect on this species with this alternative.

<u>Greater sandhill crane (Grus canadensis)</u> (California threatened). Kings Creek meadow is the only suitable habitat found in the project area. There has only been one sighting in this meadow on August 22, 2004. There has been no evidence of nesting activity in Kings Creek meadow. Due to the absence of greater sandhill cranes in the winter and the negligible effect on this meadow under this alternative, there will be no affect on greater sandhill cranes.

<u>Little willow flycatchers (Empidonax traillii brewsteri)</u> (California endangered). Due to lack of

habitat in the project area, there will be no affect to little willow flycatchers with the activities proposed in this alternative.

<u>Rufous hummingbirds</u> (*Selasphorus rufus*). Due to it migratory nature and lack of habitat in the project area, this alternative will have no effect on this species.

<u>Vaux's swift (Chaetura vauxi)</u>. This species has been documented at Manzanita Lake. This species uses snags and hollow trees for nesting. This project will have a negligible effect on this species due to already current level of disturbance around Manzanita Lake and lack of habitat modification.

<u>Black swift (Cypseloides niger)</u>. There will be no effect on this species with this alternative due to lack of habitat in the project area.

<u>American dipper (*Cinclus mexicanus*)</u>. This species does occur along Manzanita Creek and Manzanita Lake. There will be no habitat modification with this project and with the current level of disturbance there would be a negligible effect on this species with this alternative.

<u>Lewis' woodpecker (Melanerpes lewis)</u>. This species has been documented in the park. There is habitat for this species within the project area but this habitat will not affected by the project. This project will have a neglibible effect on this species due to already current level of disturbance in the project area and lack of habitat modification.

<u>Prairie falcons (Falco mexicanus)</u>. This species will not be affected by this alternative due to lack of habitat in the project area.

Northwestern pond turtles (*Clemmys marmorata marmorata*). This species has been documented historically in the Manzanita, Reflection Lake area. There have been no recent sightings of this species within Lassen Volcanic National Park. Although habitat does occur within the project area at Manzanita Lake, this habitat will not be altered with this project. Due to the current level of disturbance and lack of habitat alteration, there will be negligible effects on this species with this alternative.

<u>Cascades frog (Rana cascadae)</u>. This species has not been documented in the project area although habitat may exist in Manzanita Lake. It is believed this alternative will have negligible effect on this species due to lack of habitat modification and current level of disturbance.

<u>Eagle Lake rainbow trout (Oncorhynchus mykiss auilarum).</u> Habitat for this species will not be modified with this project. Due to current high levels of disturbance, catch and release regulations, and lack of habitat modification there will be a negligible effect on this species by this alternative.

<u>Cumulative Impacts</u>. The primary cumulative impacts to wildlife are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of the preferred alternative, would result in negligible adverse cumulative impacts to wildlife.

<u>Conclusion.</u> The preferred alternative would have a minor, long-term, adverse effect, but would not impair wildlife.

Impacts on Wildlife for Alternative 3

Alternative 3 would result in a minor, long- term adverse effect on wildlife. The addition of a lodge at Manzanita Lake would result in increased visitor use in the area. Having more people concentrated in the area, could result in minor impacts to wildlife. There would also be a minor, short- term adverse effect to wildlife. There would be a need to do some minor removal of vegetation (habitat for small animals) in order to clear the area for the lodge and the parking lot. The clearing of vegetation which serves as habitat would be minimal.

<u>Federally Threatened and Endangered Species</u>

Along with the addition of tent cabins in the Old Loop B campground there will also be rental of small boats, canoes or kayaks with this alternative. There will also be a new lodge constructed close to Manzanita Creek. This area is currently heavily used by visitors for hiking, fishing, and picnicking. Due to the current heavy use in this area this alternative is not likely to adversely effect bald eagles.

There would be no effect on any other Federally listed species from this alternative due to the lack of these species to occur within the park or the project area.

Candidate Species

There would be no effect on any candidate species from this alternative due to the lack of these species to occur in the park.

Species of Concern

The effects of this alternative on species of concern are the same as the effects from alternative 2.

<u>Cumulative Impacts</u>. The primary cumulative impacts to wildlife are the same as those listed above under the no- action alternative. Impacts from those actions, together with the impacts of alternative 3, would result in negligible cumulative impacts to wildlife in the Park.

<u>Conclusion.</u> Alternative 3 would have a minor, long-term, adverse effect, but would not impair wildlife in the Park.

Archeological Resources

Affected Environment

Archeological sites are distributed throughout the Park, from elevations of 5,500 feet to 7,000 feet. These cultural resources include a large village, lithic workshops and numerous smaller seasonal camps. Many sites, because of their seasonal, high elevation nature, have limited deposits.

Little is known of the early part of the prehistoric chronology of Lassen Volcanic National Park.

This may be because large areas suitable for use as seasonal campsites have been covered by the eruptions of Lassen Peak during and prior to the early 20^{th} century. There appears to be more evidence of prehistoric aboriginal use in the southern part of the Park (most likely due to the volcanic disturbance in the north). These southern sites are generally low in elevation (often in the open valleys), near fresh water, and in areas that support game and other wild resources. The lack of early sites represented in the archeological record appears to be partly due to the limited numbers of cultural resource inventories and test excavations conducted in the area.

To date, approximately five percent of the Park has been surveyed for archeological resources and 92 archeological sites have been recorded, ten of which are listed as the Sulphur Creek Archeological District on the National Register of Historic Places.

Impacts on Archeological Resources for Alternative 1 (No Action)

There would be no additional impacts (no effect) on known archeological resources as a result of the implementation of the No Action Alternative. Although routine maintenance and minor repairs have the potential for uncovering archeological resources, mitigation measures would ensure that there would be no adverse effect on these resources should they be found.

<u>Cumulative Impacts</u>.. There would be no project- related contributions to cumulative impacts from the No Action Alternative.

<u>Conclusion.</u> The proposed actions under the No Action Aternative would have no adverse effect on and would not impair park archeological resources or the values for which they have been protected.

Impacts on Archeological Resources for Alternative 2 (Preferred)

Activities in Alternative 2 that could effect previously unidentified prehistoric or historic archeological resources include excavation, grading, vegetation removal, and the installation of new buildings and infrastructure. The potential for finding previously unidentified archeological resources would be increased. However, work is taking place in previously disturbed areas and surface surveys for archeological resources will be completed prior to the project's initiation. Therefore, because mitigation measures would be employed, there would be no adverse effect on archeological resources.

<u>Cumulative Impacts</u>. The addition of visitor accommodations and associated infrastructure could affect unidentified cultural resources. Because of mitigation measures, this alternative would not be expected to contribute to cumulative effects on archeological resources.

<u>Conclusion</u>.: The proposed actions under Alternative 2 would have no adverse effect on and would not impair park archeological resources or the values for which they have been protected.

Impacts on Archeological Resources for Alternative 3

Activities in Alternative 3 that could effect previously unidentified prehistoric or historic archeological resources include the effects of Alternative 2 along with additional ground disturbance. Additional ground disturbance would increase the potential for finding previously unidentified archeological resources. However, work is taking place in previously disturbed

areas and surface surveys for archeological resources will be completed prior to the project's initiation. Therefore, because mitigation measures would be employed, there would be no adverse effect on archeological resources.

<u>Cumulative Impacts</u>. The addition of visitor accommodations and associated infrastructure could affect unidentified cultural resources. Because of mitigation measures, this alternative would not be expected to contribute to cumulative effects on archeological resources.

<u>Conclusion.</u> The proposed actions under Alternative 3 would have no adverse effect on and would not impair park archeological resources or the values for which they have been protected.

Socio-Economics

Affected Environment

The local and regional economy and most businesses in the communities surrounding the park are based on logging and wood products manufacturing, cattle ranching, agriculture, professional services, tourist sales and services, and educational research.

The economic and demographic profile of the region is favorable for expansion. The majority of visitors to Lassen Volcanic National Park are touring the region. They spend about a half- day driving through the park and stopping at interpretive attractions. While it is not considered a destination park, many visitors stay overnight in the park. Most park visitor overnight accommodations needs are satisfied through the neighboring communities of Redding and Red Bluff, although the concessioner operates a rustic lodging facility at Drakesbad. Several small communities, Chester, Mill Creek, and Lake Almanor, also provide limited food and lodging accommodations. An examination of Redding, CA indicates 15 hotels, 36 motels, nine resorts (marinas with houseboats), one hostel, and 175 restaurants. Similarly, Red Bluff, CA shows six hotels, 15 motels, and 40 restaurants. Several small communities, Chester, Mill Creek, Shingletown, and Old Station also provide limited food and lodging accommodations. The Chester Chamber of Commerce indicates that the lodging supply in Chester is limited to less than 100 beds and noted that most Lassen visitors stay overnight in either Red Bluff or Redding located 41 and 72 miles west of the park, respectively.

Impacts on Socio-economics for Alternative 1 (No Action)

The no- action alternative would continue to provide a minor, long- term, beneficial effect to socio- economics. The existing commercial services serve as a benefit to visitors and therefore have an impact on the number of visitors to the park. If there were fewer or no commercial services, visitation would be expected to decline. Because there would be no impact to visitation numbers from the no- action alternative, there would be no impact to the socio- economics of the area. Therefore, minor longer- term benefits would continue.

Cumulative Impacts..

The Southwest Visitor Center is expected to result in increased visitation at the park. Increased visitation could result in minor, long- term beneficial effects to the socio- economics of the area. Impacts from the above action, together with the impacts of the no- action alternative would result

in minor beneficial cumulative impacts to socio- economics.

Conclusion.

The no- action alternative would continue to have a minor, long- term, beneficial effect and would not impair socio- economics.

Impacts on Socio-economics for Alternative 2 (Preferred)

The preferred alternative could result in more visitors staying overnight in the park due to the availability of personal property lodging (tent cabins, Yurts, or Park Cabin models) in the Manzanita Lake Area. The increase in commercial services in other areas, however, could also result in increased visitation to the park. There is no competing lodging to the Manzanita site within Lassen Volcanic National Park. The closest competing lodging to the Manzanita Lake site is located approximately 15 miles north of the boundary between Old Station and the Hat Creek Work Center, where there is an RV park with several Yurts available for rent. Twenty-five miles away in the city of Shingletown, there is one bed and breakfast and several RV parks available. The next closest competing lodging units are located in Redding, California. Therefore, any overnight stays that could be taken away from local lodging outside of the park could be filled with the influx of an increased number of visitors to the park. Also, any increase in visitation could result in beneficial effects for other retailers and restaurants in the area. Long-term effects to socio-economics in the local area would be expected to be beneficial but negligible.

Cumulative Impacts...

The Southwest Visitor Center is expected to result in increased visitation at the park based upon studies completed by the National Park Service. Increased visitation could result in minor, long-term beneficial effects to the socio- economics of the area. Impacts from the above action, together with the impacts of the preferred alternative would result in minor beneficial cumulative impacts to socio- economics.

Conclusion.

The preferred alternative would have a negligible beneficial effect on socio- economics.

Impacts on Socio-economics for Alternative 3

Alternative 3 could result in more visitors staying overnight in the park than in the preferred alternative due to the availability of both tent cabins and a lodge in the Manzanita Lake Area. The increase in commercial services in other areas, however, could also result in increased visitation to the park. Therefore, any overnight stays that could be taken away from local lodging outside of the park could be filled with the influx of an increased number of visitors to the park. Also, any increase in visitation could result in beneficial effects for other retailers and restaurants in the area. Long- term effects to socio- economics in the local area would be expected to be minor and beneficial.

Cumulative Impacts...

The Southwest Visitor Center is expected to result in increased visitation at the park. Increased visitation could result in minor, long- term beneficial effects to the socio- economics of the area. Impacts from the above action, together with the impacts of alternative 3 would result in minor

beneficial cumulative impacts to socio- economics.

Conclusion.

The preferred alternative would have a minor beneficial effect on socio- economics.

Visitor Experience

Affected Environment

Recreational activities available at Lassen Volcanic National Park include auto touring, hiking, backpacking, camping, horseback riding, fishing, skiing, snowshoeing, ranger talks, and guided walks/tours. The park has over 150 miles of maintained hiking trails including 17 miles of the Pacific Crest Trail. Stock use by horses is permitted in the backcountry areas of the park, although most visitors travel by foot. Fishing is allowed in all streams and lakes with the exception of Manzanita Creek above Manzanita Lake. The park has extensive backcountry skiing as well as snowshoe use available; however, winter use currently comprises only about 10 percent of the park's total. Winter use is expected to increase, however, when the construction of the year- round Southwest Visitor Center is completed.

Ranger talks, guided walks/talks, and Junior Ranger and Firefighter programs are scheduled from early July through early September. While some of the activities take place only a few days a week, others run up to 7 days a week. They take place in various places across the park: Loomis Museum, Manzanita Lake Amphitheater, and the Discovery Center. Other interpretation includes handouts, wayside exhibits and roving interpreters.

Rustic lodging is available at Drakesbad Guest Ranch, in the southeast corner of the park. Drakesbad, however, is not located within the corridor of the main park road, where the majority of visitors go. The only option for sleeping within the park along the main park road corridor is to camp. No lodging and no campgrounds are open during the winter months. Backcountry snow camping is allowed.

Walk- up food services are available at the Southwest entrance and at the camper store at Manzanita Lake. Sit- down dining is available through an "American Plan" to guests at Drakesbad, and by reservation for other visitors. Currently, no food service is available during the winter months, but will become available at the Southwest Visitor Center, with potentially limited hours, when it is completed.

Commercial services such as food, gifts, educational sales, and rustic lodging are an integral part of making the visitor experience an enjoyable one at Lassen Volcanic National Park.

Impacts on Visitor Experience for Alternative 1 (No Action)

Visitor enjoyment would not be affected under the no- action alternative.

<u>Cumulative Impacts</u> A number of development projects (e.g. improving safety on several dirt roads, re-paving 22 miles of the Main Park Road, and construction of the Southwest Visitor Center) will occur in the next few years, resulting in short- term adverse effects (due to

construction) and major long- term beneficial effects. The potential adverse and beneficial effects of these actions, together with the effects of the no action alternative, would continue to result in major beneficial cumulative impacts.

<u>Conclusion</u>. The no action alternative would have no effect on visitor experience.

Impacts on Visitor Experience for Alternative 2 (Preferred)

The preferred alternative would result in moderate beneficial effects to visitor experience.

Visitors would have the opportunity to use the Visitor Center multi- purpose room for special events and the concessioner would be authorized to cater these special events.

The addition of tent cabins at Manzanita Lake would allow for more visitors to experience the park for longer periods of time. It would allow those people who do not own camping equipment, but who want to have a rustic national park experience, to do so inexpensively. This lodging option would be much less expensive than the only other existing lodging available within the Park at Drakesbad. It is recognized, however, that a small number of visitors to the campground may find the increased number of people in the area a minor adverse effect. However, these people would also benefit from an improved and expanded camper store. Visitors at Manzanita Lake would also benefit from the availability of recreational rental equipment.

Visitors to Warner Valley who are not guests at Drakesbad would have the opportunity to use the pool at Drakesbad (subject to maximum capacity and for a fee) and they would not have to purchase a meal at Drakesbad in order to do so. Hikers along the Pacific Crest Trail as well as other campers could also use the showers at Drakesbad for a fee. It is recognized that some guests at Drakesbad might consider it a major adverse effect to them to have increased numbers of people at the pool and showers. However, the park and concessioner would manage this use in such a way that it would only constitute a minor adverse effect to Drakesbad guests. Furthermore, all visitors would benefit from expanded spa services and recreation equipment rentals at Drakesbad.

Visitor experience would be beneficially affected by the addition of limited convenience item sales at Butte Lake and Juniper Lake, as well as the addition of a mobile food/grocery/gift service at Butte Lake. Both Butte Lake and Juniper Lake are in remote areas with no other services (other than the limited sale of education items at the ranger station). The addition of these services would make the difference between having to drive out of these remote areas to get needed items and being able to stay in the area.

The addition of winter use yurts at the Devastated area parking lot and the Summit Lake South Campground would provide for an excellent winter experience in a remote area with lots of snow. These yurts would make skiing into the park for more than just a day trip possible for those who do not own the proper equipment to do it on their own. For those who do own the proper equipment, the addition of these yurts could make their trip more enjoyable, as they would not have to carry their tents and other overnight equipment with them.

<u>Cumulative Impacts</u>. The primary cumulative effects to visitor experience are the same as those listed above under the no- action alternative. Impacts from these actions, together with the

impacts from the preferred alternative, would continue to result in major beneficial cumulative impacts.

<u>Conclusion.</u> The preferred alternative would have a moderate, long- term, beneficial effect on visitor experience.

Impacts on Visitor Experience for Alternative 3

Alternative 3 would result in major beneficial effects to visitor experience.

The addition of a lodge at Manzanita Lake would allow for more visitors to experience the park for longer periods of time. It would allow those people who do not like to camp to stay overnight in the park. It is expected that this would result in longer stays at the park by more people, given the opportunity for the Manzanita Lake area to be a "destination" rather than just a "drive by." It is recognized, however, that a small number of visitors to the campground may find the increased number of people in the area a minor adverse effect. However, these people would also benefit from the addition of a full service restaurant in the area.

Visitors to Drakesbad would have the opportunity for expanded horse rides that go to farther away destinations, allowing some visitors to see much more of the park than they would have otherwise. This would serve as a way for people who are not able to take long hikes to get further into the backcountry of the park.

Visitor experience would be beneficially affected by the addition of a corral that would support commercially guided horse rides at both Butte Lake and Juniper Lake. Again, this would serve as a way for people who are not able to take long hikes to get further into the backcountry of the park. Guided horse rides also serve as an excellent education tool for the public. It is recognized that the boarding of horses in these areas may be seen as an adverse effect to some visitors using the nearby campgrounds, due to the odor that accompanies the boarding of horses. The addition of boat rentals at both Butte and Juniper Lakes would also provide a beneficial service allowing for further exploration of the park and its resources.

The addition of two more winter use yurts at the Kings Creek Picnic Area and the Little Hot Springs Valley Overlook would provide for an excellent winter experience in a remote area with lots of snow. These yurts would make it possible for visitors to ski through the entire park over multiple days, making for a unique winter experience that would be both inspirational and educational.

<u>Cumulative Impacts</u>. The primary cumulative effects to visitor experience are the same as those listed above under the no- action alternative. Impacts from these actions, together with the impacts from alternative 3, would continue to result in major beneficial cumulative impacts.

<u>Conclusion</u>. Alternative 3 would have a major, long-term, beneficial effect on visitor experience.

Mitigations

Bear- proof food storage lockers would be added to Old Loop B to prevent human-bear conflicts from occurring.

All equipment would be thoroughly cleaned prior to entering the park in order to prevent the spread of non- native vegetation species.

Should presently unidentified archeological resources be discovered during implementation activities, work in that location would stop until the resources are properly recorded by an NPS archeologist and evaluated under the eligibility criteria of the National Register of Historic Places. If the resources are determined eligible, appropriate measures would be implemented either to avoid further resource impacts or to mitigate their loss or disturbance in consultation with the California State Historic Preservation Office.

CONSULTATION AND COORDINATION

A press release initiating the public scoping process and comment period was issued in early August, 2002, and was published in the Red Bluff Daily News on August 12, 2002. Also in early August of 2002, a newsletter was sent to 245 organizations, agencies, and individuals notifying them about the start of the planning process for the Commercial Services Plan and of upcoming public scoping meetings.

Public scoping meetings for this plan were held in 2002 in Chico (August 19), Red Bluff (August 21), Redding (August 20), and Chester (August 22). They were an open house format with information displayed to generate discussion with park and planning team staff. A total of 32 people participated in the meetings and 6 individuals mailed comment letters to the park.

In August, 2004, a second newsletter was sent to the same 245 organizations, agencies, tribes, and individuals, informing them about the comments received during the scoping period, the alternatives being formed, and the future timeline for the plan.

On June 8, 2005, the first EA for the Commercial Services Plan was put out for public review and was available for a thirty day public review and comment period. Four comments were received during the EA review period. Another comment letter was received on March 5, 2006. All of these comments were considered in this, the second EA for the Commercial Services Plan.

With changes in personnel for several key park positions, the first EA and Commercial Services Plan were carefully reviewed along with public comments. It was decided in the Fall of 2005 that several significant changes were needed within the plan and that a new plan and EA would be drafted.

This EA will be available for a **thirty-day** public review period. At that time, a press release will be distributed to people and businesses who have expressed an interest in the Commercial Services Plan. The press release will also be mailed to a list of persons and agencies that have expressed interest in Lassen Volcanic National Park proposed actions and events. The EA will also be mailed to local libraries, organizations and individuals that have requested to receive a copy of the EA as well as others who request copies during the review period. This EA will also be available on the park's website, located at http://www.nps.gov/lavo.html.

Because there would be no effect on listed or candidate species from the alternatives in this Environmental Assessment, no further Section 7 (Endangered Species Act) consultation with the United States Fish and Wildlife Service is necessary for this plan.

Because there would be no effect on cultural resources from the alternatives in this Environmental Assessment, no Section 106 (National Historic Preservation Act) consultation with the California State Historic Preservation Office is necessary for this plan.

Comments on this Environmental Assessment should be directed to:

Superintendent Lassen Volcanic National Park P.O. Box 100 Mineral, California 96063

If reviewers do not identify substantial environmental impacts, this Environmental Assessment will be used to prepare a Finding of No Significant Impact (FONSI), which will be sent to the NPS Pacific West Regional Director for signature.

For more information concerning this Environmental Assessment, please contact the park Superintendent at (530) 595-4444, extension 5101. For a copy of this document, please call Lassen Volcanic National Park at (530) 595-4444, extension 5176.

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APPENDIX A - COMMERCIAL SERVICES EVALUATION PROCESS

The evaluation of commercial services to be provided takes place at two distinct stages of the planning process. First, as part of the development of a *Commercial Services Plan*, the park develops an evaluation process for commercial services and uses it to determine whether its existing and proposed services are necessary and/or appropriate. Secondly, as the plan is implemented, the park uses this evaluation process to respond to requests from those wishing to provide a particular service.

The National Park Service (NPS) may also use this process to analyze recommendations from other agencies, special use groups, or NPS employees for proposed commercial activities or services believed necessary and/or appropriate for any of the various commercial authorizations.

This section identifies the steps that the National Park Service at Lassen Volcanic National Park will use in thoroughly reviewing and analyzing prospective commercial activities and proposals during the development of the *Commercial Services Plan*. By developing Evaluation Criteria for Lassen Volcanic National Park as suggested in Sample A-1, the park establishes a consistent and fair evaluation process for all services and proposed requests. Maintaining a list of approved and non-approved activities, along with a clear record of factors leading to an NPS decision, will allow the park to respond to requests to conduct these activities efficiently and consistently.

In evaluating a potential commercial activity, it is beneficial to first consider whether the activity is appropriate, by measuring the activity against the laws, policies and regulations governing the park area. If these do not prohibit the activity, and it promotes the furtherance of the mission for the park area, the activity is appropriate.

Some appropriate activities will also be necessary in order for the park to fulfill its mission. If a park determines that a commercial service is both necessary and appropriate, and it is not currently provided through a contract, the park will enter the process of developing a prospectus for a contract for the provision of this service. This determination may be generated during the development of the Commercial Services Plan, or in response to a request from an

individual or organization. All NECESSARY and APPROPRIATE commercial services must be placed under a contract. Any individual or organization may respond to a prospectus after it is issued.

All laws and policies applying to the development and issuance of concessions contracts must be followed.

If a park determines through the evaluation process that a commercial service is not necessary, but is appropriate, it may use further evaluation to determine what type of permit should be issued. Various considerations may lead to the park determining that various operational limits should be placed on the activity. These considerations will be encountered and dealt with through the evaluation process, and also during the issuance of the permit itself.

Generally, the pattern to be followed by the park upon receipt of a request is to determine:

- Is this a request for a commercial service, or some other type of activity? If it is for another type of activity, the request should be passed on to the person in the park responsible for such.
- 2. Is this a request for an appropriate commercial service? If it is, or appears to be, the park should send the requester an application, and follow the processes appropriate to issuing a commercial use authorization for an appropriate kind and level of service.
- 3. Is this a request for a necessary and appropriate commercial service? If it is, the park should invite the requester to enter the prospectus process when it occurs. This may involve saying no for the moment. Such requests should be tracked and honored when the prospectus becomes available.

Updates to the *Commercial Services Plan*, including changes to the list of approved activities, will be initiated by the National Park Service as circumstances change. Initially, updates could be anticipated every two to three years. However, the superintendent could delay or initiate an update at any time.

Figure A- I is an example of a commercial services evaluation rating form to be completed by an interdisciplinary NPS team in response to commercial proposals. Following the sample form is a point by point explanatory breakdown of the various sections of the form so that the reader or evaluation panel can interpret its intent.

COMMERCIAL SERVICES EVALUATION RATING FORM

Type of Service		
Name of Applicant		Date
CRITERIA	EVALUATION (+ or -) **	COMMENTS
LEGAL/POLICY		
Compliance with GMP GMP Management		
Law and Policy		
Park Mission		
NEPA & NHPA		
Concession Contract		
VISITOR USE / EXPERIENCE ISSUES		
Public Safety		
Education &		
Social & Resources		
RESOURCE ISSUES		
Cultural/Historic		
Natural Resources		
Aesthetic Resources		
OPERATION ISSUES		
Land Requirements		
Staffing Needs		
Infrastructure/Services		
OTHER ISSUES	Discussion	Not rated
Partnership Opportunities	S	
New Activities		
Cumulative Effects		
Recommendation	Additional Com	ments and Recommendations
Approved		
Disapproved		
Resubmit		
Other Issues	1	

- = negative impact for park and visitors

If negative impacts outweigh benefits, discussion of overall merits by interdisciplinary team will determine whether an activity is authorized.

^{** + =} beneficial affect for park, no legal or policy restrictions

EVALUATION CRITERIA

All existing and proposed commercial activities at Lassen Volcanic National Park will be evaluated to determine if they are necessary and/or appropriate. This exercise establishes an initial list of approved activities, which may be subsequently updated. Individual applications to provide commercial services will also be evaluated to identify conditions or stipulations to be added to a contract or commercial use authorization.

An evaluation form (figure A- 1) can be used to ensure a consistent review of all activities and applications. The criteria used in the evaluation include legal, recreation, resource, management, and other issues. These criteria are derived from the preceding discussion of park purpose, significance, and desired futures that were taken directly from the *General Management Plan*. The criteria form the basis of the evaluation process.

How each criteria on the evaluation form are reviewed and how a final recommendation is made is explained below in the specific sections corresponding to the form. The evaluation also identifies which type of authorization is appropriate for new proposals.

LEGAL AND POLICY ISSUES

Federal, state, and local laws, rules, codes, and regulations will be reviewed to determine if the activity would comply with law and NPS policies related to that activity. Any violation or conflict with a law or regulation would result in rejection of the proposal or application.

The regulations, guidelines, and laws used to evaluate new proposals for compliance with existing concessions policy would include, but not be limited to:

CFR 36 - 2.22, Property

CFR 36 - 2.52, Sale or Distribution of Printed Material

CFR 36 - 2.61, Residing on Federal Lands

CFR 36 - 5, Commercial and Private Operations

CFR 36 - 51, Concessions Contracts and Permits

U.S. Public Health Service, FDA Food Code, 1993

NPS-48 Concessions Guideline

NPS- 50 Loss Control Management Program Guideline

NPS- 53 Special Park Uses

SD-95-10 Incidental Business Permit

General Management Plan

Park Compendium

Various management plans

Compliance with GMP. If a proposed activity would be in conflict with the guidance and direction outlined in the General Management Plan, it would not be authorized.

GMP Management Prescriptions. Management zones are used to describe the desired mix of resource conditions and visitor experiences to be achieved in different areas of the park. Eight zones are identified at Lassen Volcanic National Park: Wilderness, Winter Backcountry, Scenic Drive, Summer Developed, Winter Developed, Remote Unit Access Road, Administration, and Inholder Zone

Wilderness Zone: This zone, encompassing a majority of the park, consists of legislatively designated wilderness and lands considered for proposed designation. It is managed consistent with the Wilderness Act and National Park Service policies regarding wilderness.

Winter Backcountry Zone: This zone goes into effect when the main park road is closed for the winter season. It includes the entire park except the Wilderness, Administrative, Remote Unit Access Road, and Winter Development Zones.

Scenic Drive Zone (Summer): This zone includes the main park road extending from Highway 44 junction at the north entrance to the southwest entrance. It encompasses the paved roads, pullouts, overlooks, and associated trails and small picnic areas, parking areas, and other facilities that support visitor touring. It includes Manzanita Lake, Emerald Lake, Reflection Lake, Devastated Area, Sulphur Works, Lake Helen, Lassen Peak Trail, and Bumpass Hell Trail.

Remote Unit Access Road Zone (Summer): This zone encompasses the major access roads serving Butte Lake, Juniper Lake, and Warner Valley areas.

Summer Developed Zone: This zone includes areas with major visitor facilities that are accessible and usable in the summer months. Visitor service facilities, concession facilities, ranger stations, and major campgrounds and picnic areas are included in the developed zone.

Winter Developed Zone: This zone includes areas with major visitor facilities that are accessible and usable in the winter months. Visitor service facilities, concession facilities, and ranger stations are included in the developed zone.

Administrative zone: This zone includes the developed areas used for administration and maintenance. Included in this zone are major administrative areas at headquarters and Manzanita Lake, minor service roads for administrative use, and minor administrative structures and utility features.

Inholder zone: This zone includes the two areas of inholdings within the park, Hat Creek and Juniper Lake. The total area of the zone is approximately 5.66 acres. Within the zone are 14 privately owned tracts.

FIGURE A-2: LAND USE ZONES/SUBZONES AND MANAGEMENT STRATEGIES

Zone	Management Strategy
Wilderness Zone	Manage for appropriate visitor behavior through education and limit visitor numbers. Onsite controls and restrictions are minimized and those that are present are subtle.
Winter Backcountry Zone	Management is similar to wilderness. Resource protection is achieved through education, control of numbers, and patrols. No additional development in this zone, except for signing to facilitate visitor use or park management.
Scenic Drive Zone (Summer)	Manage intensively with patrols, trail, road and roadside facility maintenance, interpretive media and activities. Development is evident but designed to harmonize with natural environment.
Remote Unit Access Road Zone (Summer)	Patrols occur for visitor and resource protection. Onsite controls and restrictions are subtle, such as berms, rocks, or vegetation to prevent vehicles from leaving the road. Some development is evident.
Summer Developed Zone	Manage for high level of visitor protection and safety through patrols, wayside exhibits, and interpretive programs. Facilities are rustic and landscaping employs native plants. Buildings, structures, and signs predominate.
Winter Developed Zone	Manage for high level of visitor protection and safety through patrols, wayside exhibits, and interpretive programs.
Administrative Zone	Manage for high level of protection and safety. Buildings, structures, and utilities predominate. Sensitive management for historic settings and landscapes. Landscaping employs native plants.
Inholder Zone	Manage in partnership with property owners to achieve mutual goals. Tracts that are acquired through offer for sale will be rezoned as appropriate.

It is NPS policy that rights- of- way across land administered by the National Park Service may be issued only pursuant to specific statutory authority and only if there is no practical alternative to such use. Rights- of- way, easements, and special use permits are all land assignments that authorize various uses of public land. The proposed activity will be reviewed to ensure that it

would not conflict with legislation or land assignments and that there would not be impacts on park values. In cases where a land use conflict exists, the established or permitted land assignment would prevail.

Law and Policy. If a proposed activity would be in conflict with law, regulation, or policy it would not be authorized until changes are made to mitigate the conflict.

Park Mission. If a proposed activity is in conflict with the stated mission of the park as outlined in the *General Management Plan* and other documents it will not be authorized until changes are made to mitigate the conflict.

The mission of the Park is to conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations.

Additional data is available in the Strategic Plan (NPS 2003b).

NEPA & NHPA. If a proposed activity requires documentation of compliance with the National Environmental Policy Act (as defined in NPS Director's Order 12) or requires consultation and documentation of compliance with the National Historic Preservation Act it will not be authorized until such documentation has been completed or changes have been made to the proposal that no longer require such compliance. The proposed activity will not be approved if compliance with NEPA and NHPA cannot be achieved.

Every permit request will be reviewed by the Park's interdisciplinary compliance council and will be assessed in compliance with NEPA and NHPA on an individual basis. Permits will be evaluated on an individual basis rather than assessing a category of permits within this document. In order to determine potential impacts, specific information about the proposed activity would be needed, such as the number of visitors that will partake in the activity and where the activity is proposed to take place. This document lists the types of activities that have gone through the commercial services evaluation process; however, when an individual applies

for a permit under one of these approved categories, their permit request will then go through the NEPA process.

The Concessions Contract. Are there conflicts with an authorized service already provided by a concessioner under a concession contract? Check carefully whether a concessioner has exclusive rights to provide a service, or has preferential right to provide new and additional services, as is sometimes found in older contracts.

VISITOR USE/EXPERIENCE ISSUES

These criteria help measure impacts on the visitor experience and ensure compliance with NPS goals and objectives for suitable visitor activities.

Public Safety. Promoting safety is a high priority. All permits issued should incorporate safety measures to promote a safe visitor experience. Proposals for activities should recognize potential hazards and offer methods for mitigating them (although the park may choose to require other methods).

Education and Interpretation. The themes of any activity should conform with the purposes for which the park was established. The park may choose to require a certain level of interpretive purpose and meaning within the provision of a commercial service, and the provider should work within the park's interpretive guidelines to do so. The park may also choose to audit any activity for the provider's compliance with this requirement.

Social & Resources Carrying Capacity. Some locations and activities may be extremely popular. There may be potential for conflicts between commercial and non- commercial users, and for localized crowding and congestion. Crowding could detract from visitor experience and increase impacts on the associated resources. When crowding, congestion, traffic impacts or conflicts occur, use limits will be established to protect both visitor experience and park resources.

RESOURCE ISSUES

Cultural/Historic Resources. Cultural resources are defined as the remains of past human activity that have the potential to describe and explain human behavior (NPS- 28). The presence of numerous cultural resources lends significance to the purpose of setting aside land for the public trust. All proposed commercial activities will be evaluated based on their impact on these fragile, nonrenewable resources. If there is a potential for impact to the cultural or historic environment, documentation of compliance with the National Environmental Policy Act and the National Historic Preservation Act must be completed before the proposed activity will be approved.

Natural Resources. The effect of any proposed activity on natural resources such as plants, wildlife, water and air must be considered. If there is a potential for impact to the natural or physical environment, or the relationship of people with that environment, documentation of compliance with the National Environmental Policy Act must be completed before the proposed activity will be approved.

Aesthetic Resources. Impacts on aesthetic resources can have a significant impact on the experiences of commercial clients and typical visitors. Such resources might include quiet, solitude, scenery (other than cultural landscapes), space, a sense of history, sounds of nature, air quality and clear night skies. Commercial activity requests are evaluated for impacts on aesthetic resources. If such impacts appear likely, the proposal would be adjusted to mitigate those issues or disapproved.

OPERATION ISSUES

Commercial activities of all types create a demand on the National Park Service for management oversight. Time and effort are required to issue various authorizations, monitor activities for compliance with permit restrictions, collect fees, assign and maintain support facilities, etc.

Often these activities require the attention and commitment of park staff at the expense of providing for the general public and noncommercial visitors.

Land Requirements. Facilities (to include all land developments) are not authorized for commercial use authorizations. In order to be given a land assignment, the activity must be both

necessary and appropriate, and the authorization must be issued in the form of a concession contract.

Staffing Needs. The amount of staff time for processing an application, the approval/rejection and evaluation process, and subsequent authorization and monitoring requirements are all considerations in what type or level of activity is approved. For example, the following definitions of complexity might apply for monitoring:

- 1. High: the successful monitoring of the activity would include administrative, compliance, and onsite contact with the operation on a weekly basis.
- 2. Medium: Successful monitoring would include administrative, compliance, and onsite contact on a biweekly to monthly basis.
- 3. Low: Successful monitoring would include administrative, compliance, and onsite contact with the operation on a monthly to quarterly basis.

Infrastructure/Services. Many commercial activities require support facilities and/or services provided by the National Park Service such as parking spaces, restrooms, changing rooms, water and other utilities, and picnic areas. Such support activities have an overall impact on available budget and financial resources to provide and maintain the facilities and services, and possible impacts on natural and cultural resources. When the demand for commercial services combined with non- commercial use exceeds the supply of support facilities and services, the proposed commercial activity might be denied or the proposal modified.

OTHER ISSUES

Local situations and conditions that are not anticipated would be identified on a case- by- case basis. A brief definition of the situation would be written and attached to the evaluation form as necessary. Among issues to be considered:

Partnership Opportunities. The National Park Service accomplishes its mission partly through support and partnerships with neighboring communities, agencies, organizations, and individuals. Activities and proposals are evaluated not only for their effect on the park but for effects on neighbors, especially when issues are the subject of cooperative arrangements.

New Activities. Proposals for activities not currently available could create new and different effects on resources and visitor experiences. New activities should be evaluated more thoroughly than current activities whose impact is already known.

Cumulative Effects. Activities and proposals would be evaluated to determine if they could contribute to adverse effects when added to other commercial services in the region.

LIST OF PROPOSED AUTHORIZED ACTIVITIES:

Guided hiking

Guided camping

Guided Art Seminars

Guided photography

Guided Skiing and Snowboarding

Guided Snowshoeing

Guided overnight backpacking

Guided fishing

Guided kayaking/canoeing

Bus Tours

Hiker Shuttle

Emergency Road Services

Step on guide service for bus tours

Guided stock trips (day trips only) from Butte and Juniper Lakes

LIST OF DISAPPROVED ACTIVITIES:

Overnight stock/packing trips (horse, llama, goat, etc.) of a commercial nature Bicycle touring

Hang gliding and other activities not allowed per Superintendent's compendium